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# China Report

PLANT AND INSTALLATION DATA

No. 47

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CHINA REPORT  
PLANT AND INSTALLATION DATA

No. 47

CONTENTS

I. Metallurgical Industry.....	1
II. Transportation Equipment Industry.....	3
III. Electronic and Precision Equipment Industries.....	6
IV. Chemical Industry.....	12
V. Fuel and Power Industries.....	16
VI. Machine-Building Industry.....	19
VII. Agricultural Machinery Industry.....	25
VIII. Miscellaneous Industries.....	28
IX. Photographs of Industrial Facilities.....	36

## I. METALLURGICAL INDUSTRY

Item: Liancheng Aluminum Plant  
[6647 1004 6986 0617]

Location: Liancheng, Gansu, PRC

Data: During the hot summer month of July, this plant registered an aluminum ingot monthly output of more than 5,000 tons, the highest monthly output since the beginning of 1983. As of 29 August, the plant has conserved 4.17 million kilowatt hours of electricity, making it possible to realize a profit of 1.28 million yuan. In 1982, due to poor management which led to poor product quality and high electric power consumption, the plant produced 6,409 fewer tons of aluminum ingots and delivered to the state 12.67 million fewer yuan in profits. It consumed 86.16 million kilowatt hours more than the planned target, which is equivalent to 35,000 tons of standard coal, and the up-to-standard rate of aluminum ingots was only 55.54 percent. After a reorganization and the adoption of a series of measures to improve product quality and reduce energy consumption in February this year, the plant's aluminum ingot up-to-standard rate shot up to 97.5 percent and its aluminum ingot output for the first half of 1983 reached 29,990 tons. Its energy consumption was cut by 3.69 million kilowatt hours, and its profit for the same period topped 7.17 million yuan.

Source: Lanzhou GANSU RIBAO in Chinese 5 Aug 83 p 1

Item: Taiyuan Iron and Steel Company  
[1132 0626 6921 6993 0361 0674]

Location: Taiyuan, Shanxi, PRC

Data: China's first 18-ton argon-oxygen refining furnace was officially put into operation here on 17 September. The argon-oxygen process is a new, important technology in smelting ultra low carbon stainless steel. The stainless steel produced by this new process is less expensive and of high quality, as compared to the refining processes currently employed in China.

Source: Lanzhou GANSU RIBAO in Chinese 20 Sep 83 p 1



Item: Jinchuan Nonferrous Metals Corporation  
[6855 1557 7236 6855 1466 0361 0674]

Location: Jinchang City, Gansu, PRC

Data: The expansion projects of this corporation are in full swing. As of the end of July, 378 of 475 unit projects have started and 120 projects have been completed, fulfilling the total investment plan for the 6th Five-Year Plan period by 34 percent. Its expansion projects include the construction of the No 2 Mining Zone and the expansion and transformation of ore-dressing and smelting systems. Upon completion of all these projects, the corporation's output capacity will increase from the current annual nickel output of 10,000 tons to 20,000 tons by 1985. The output of copper, cobalt, gold, silver and platinum group metals will also increase substantially. The expansion projects for the ore-dressing and refining systems, which began in 1982, are progressing smoothly due to the establishment of a unified leadership and the coordinated efforts of the leading cadres, engineers, technicians, and workers.

Source: Lanzhou GANSU RIBAO in Chinese 30 Aug 83 p 1

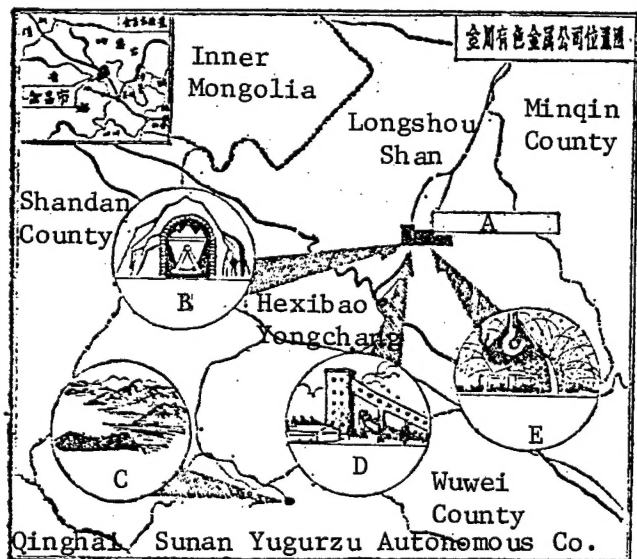
[Map on Card 2]

[Continued from Card 1]

Item: Jinchuan Nonferrous Metals Corporation  
[6855 1557 7236 6855 1466 0361 0674]

Location: Jinchang City, Gansu, PRC

Data: Location map of the Jinchuan Nonferrous Metals Corporation



Key:

- A. Jinchuan Nonferrous Metals Corporation
- B. Mine expansion project
- C. Huangchengtan reservoir project
- D. Ore-dressing expansion project
- E. Smelting expansion project

## II. TRANSPORTATION EQUIPMENT INDUSTRY

Item: Motor Vehicle Manufacturing Plant No 2  
[4574 1708 3086 6508 0455 6644 0617]

Location: Shiyan, Hubei, PRC

Data: More than one-third of the planned construction area of this automobile plant, the largest modernized motor vehicle manufacturing plant in the country, has been completed. One-third of the equipment has been installed and put in place. The majority of its continued projects are scheduled for completion in 1985. From 1978 when it started operation to the end of June 1983, this enterprise has produced 174,000 2.5-ton and 5-ton civilian trucks. Upon completion of all the expansion projects, its annual output capacity will reach 75,000 motor vehicles.

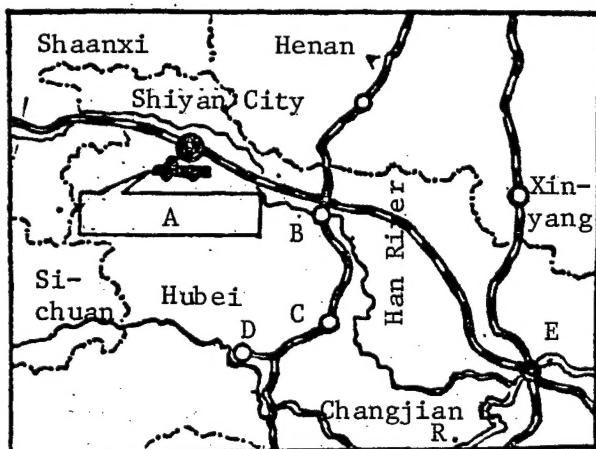
Source: Shanghai JIEFANG RIBAO in Chinese 29 Aug 83 p 2

[Continued on Card 2]

Item: Motor Vehicle Manufacturing Plant No 2  
[4574 1708 3086 6508 0455 6644 0617]

Location: Shiyan, Hubei, PRC

Data: Location map of Motor Vehicle Manufacturing Plant No 2



- A. Motor Vehicle Manufacturing Plant No 2
- B. Xiangyang
- C. Jingmen
- D. Yichang
- E. Wuhan

Source: Shanghai JIEFANG RIBAO in Chinese 29 Aug 83 p 2

Item: Fangcheng Port  
[7089 1004 3263]

Location: Fangcheng County, Guangxi, PRC

Data: A ceremony was held here on 2 October to mark the official opening of this port to foreign vessels. Construction of this natural harbor project began in 1968. At that time there were only a few floating docks. The No 1 and No 2 berths, which are capable of docking 10,000-ton ships and handling 750,000 tons of cargo annually, are now in operation. The main construction work on three berths capable of mooring 15,000-ton-class vessels and two berths capable of docking 20,000-ton-class vessels has in the main been completed. The total design scale calls for an annual cargo handling tonnage of 3.6 to 4 million tons and the entire project is scheduled for completion in 1986.

Source: Hong Kong TA-KUNG-PAO in Chinese 2 Oct 83 p 1

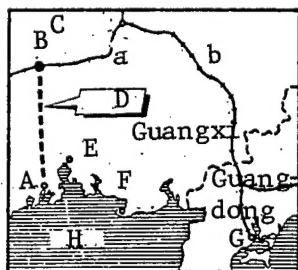
[Continued on Card 2]

[Card 2]

Item: Fangcheng Port  
[7089 1004 3263]

Location: Fangcheng County, Guangxi, PRC

Data: Location map of Fangcheng Port



Key:

- A. Fangcheng
- B. Nanning
- C. Litang
- D. Nanning-Fangcheng Rail Line
- E. Qinzhou
- F. Beihai
- G. Zhanjiang
- H. Beibu Wan
- a. Xiangtan-Guilin Railway
- b. Litang-Zhanjiang Railway

Source: Hong Kong TA-KUNG-PAO in Chinese 2 Oct 83 p 1

Item: Beijing Motor Vehicle Manufacturing Plant No 2  
[0554 0079 4574 1708 3086 6508 0455 6644 0617]

Location: Beijing, PRC

Data: This plant has successfully developed two new types of motor vehicles--double row seat 1.5-ton motor vehicle and 2-ton capacity diesel truck. The double row seat motor vehicle can carry both passengers and freight, carrying six people in the cab. Equipped with a high-speed diesel engine and five-speed synchronous gearshift, the fuel economy diesel truck consumes 30 percent less fuel per 100 kilometers than the gasoline truck of the same tonnage and 66 percent less than a tractor carrying the same load. These two new types of motor vehicles have passed the technical evaluation tests and are expected to be put into limited production shortly.

Source: Beijing GONGREN RIBAO in Chinese 13 Sep 83 p 1

Item: Haidong Shipyard  
[3189 2639 5309 0617]

Location: Jiaojiang City, Zhejiang, PRC

Data: Results of a test run conducted on the fuel-economy vessel, Zhejiaoji No 18, built by this shipyard show that the ship can carry a cargo load of 450 tons, travel at a speed of 9.3 knots (the actual requirement is 8 knots), and consume 5.5 kilograms of fuel oil per 1,000 tons/kilometer, 14 kilograms below the local average fuel consumption value of 19.5 kilograms. Because of rational design and selection of materials, the sale price is about 30 percent lower than that of ordinary vessel. When put into operation, the ship will earn back its cost in 3 to 4 years.

Source: Shanghai JIEFANG RIBAO in Chinese 5 Jul 83 p 3

### III. ELECTRONIC AND PRECISION EQUIPMENT INDUSTRIES

Item: Shanghai Television Tuner Plant  
[0006 3189 7193 6018 6148 6168 0892 0617]

Location: Shanghai, PRC

Data: China's largest television tuner production line was put into operation here on 17 September. The production line, which can turn out 10 tuners per minute, has a design annual output capacity of 1.5 million television tuners. The television tuners produced in the country are the mechanical type suitable only for black and white television sets. The country has been relying on imported color television electronic tuners. The newly built production line can turn out both the mechanical and electronic tuners.

Source: Lanzhou GANSU RIBAO in Chinese 20 Sep 83 p 3

Item: Shijiazhuang City Radio Plant No 10  
[4258 1367 8369 1579 3541 4848 7193 0577 0617]

Location: Shijiazhuang City, Hebei, PRC

Data: Employing only 160 people, this small-scale collective enterprise is specialized in the production of radio power source equipment. In the past several years it had only six engineers and technicians and turned out only four kinds of power source products in 5 years, and its production was virtually at a standstill. In the past 3 years, however, by stepping up its recruitment of experienced and skilled personnel and acquiring more production assignments from the state, it now has 26 engineers and technicians, accounting for 16 percent of the total number of employees and workers in the plant. By 1982, they have developed and manufactured 16 product varieties, forming a complete current and voltage stabilizer power source series. Their output volume for the January-July 1983 period showed an increase of 35.9 percent and output value for the same period rose 46.6 percent over the same 1982 period.

Source: Shijiazhuang HEBEI RIBAO in Chinese 1 Sep 83 p 1

Item: Ningxia Electronic Instruments Plant  
[1337 1115 7193 1311 0308 0892 0617]

Location: Yinchuan, Ningxia, PRC

Data: From 1981 up to the present, this plant has developed and successfully manufactured 13 kinds of new products and is currently upgrading and modifying 16 products. It has become an electric power insulation testing instruments factory turning out the most product varieties and with the highest sales volume in the country. To meet the keen competition in the electric power industry, the plant has assigned 80 percent of its technical personnel to concentrate on upgrading old products and developing new products and has achieved marked economic results in its efforts toward improving production and product sales. As of the end of August, it has realized a profit of 80,000 yuan, surpassing the 1983 profit plan by 19 percent.

Source: Yinchuan NINGXIA RIBAO in Chinese 20 Sep 83 p 2

Item: Handan City Nondestructive Detection Instruments Plant  
[6725 6779 1579 3541 2275 2232 3261 0308 0892 0617]

Location: Handan, Hebei, PRC

Data: This plant has developed and manufactured an X-III multifunction X-ray stress analyzer which has passed an evaluation test on 27 September. Extensively used in laboratories, workshops, and production sites, the instrument can quickly and non-destructively determine the residual stress on the surface of materials and the amounts of austenite in steel. It also provides reliable parameters for technical research, precision control, and service life analysis of all types of components and parts.

Source: Shijiazhuang HEBEI RIBAO in Chinese 3 Oct 83 p 1

Item: Gansu Optical Instruments Plant  
[3927 5126 0342 1331 0308 0892 0617]

Location: Linxia, Gansu, PRC

Data: The Fenghuang (Phoenix) JG304 camera successfully trial manufactured by this plant has passed the evaluation test at a recent meeting attended by 40 representatives and experts from the Camera Research Institute and departments concerned. The camera is equipped with an imported electronically programmed shutter, automatic exposure, built-in flashing lamp, and other advanced devices. Its main technical indicators are up to the advanced level of similar foreign products. The camera will go into batch production after some improvements suggested by the experts have been made. The successful trial manufacture of the JG304C has made this plant the sole manufacturer of electronically programmed shutter camera in the country at this time.

Source: Lanzhou GANSU RIBAO in Chinese 2 Sep 83 p 1

Item: Nanfang Radio Plant  
[0589 2455 3541 4848 7193 0617]

Location: Guangzhou, Guangdong, PRC

Data: This plant has netted a profit of 400,000 yuan in the first half of 1983 as a result of the manufacture of its "Nanfang" brand table model stereo receiver-recorder with four loudspeakers, which only a small number of factories in the country is able to produce. Since the product was put into production early this year, the monthly output has been increasing and sales have been brisk. For the first 6 months of 1983, this plant has manufactured 8,800 of the stereo receiver-recorders and the demand for the product, which is priced at 380 yuan, is growing. Prior to the production of this "hot" item, the plant had experienced difficulties due to the "glut" of radio receivers in the domestic market.

Source: Guangzhou GUANGZHOU RIBAO in Chinese 9 Jul 83 p 1

Item: Lishan Microelectronics Company  
[7537 1472 1792 7193 1311 0361 0674]

Location: Probably Beijing, PRC

Data: A subordinate unit of the Ministry of Space Industry, this company has successfully trial manufactured three integrated circuits for black and white television sets: sound power amplification circuits CD0355, video intermediate-frequency amplification circuit CD1366, and frame scanning circuit CD1031. The power source voltage of the CD1336 is 15V; output signal voltage, 3V<sub>p-p</sub>; power, 875 mW, and operating temperature, -20~+75°C. The DC0355 has a power source voltage of 20V; power consumption, 1.8W, and operating temperature, -20~+70°C. The CD1031's power source voltage is 20V, output current, 2Ap-p, and operating temperature, -20~+75°C. These three circuits require fewer peripheral components and are easy to adjust and are more reliable. They are suitable for use in assembling 12-inch, 14-inch, and 17-inch B&W TV sets.

Source: Beijing (WUXIANDIAN (RADIO) in Chinese No 8, 1983 p 13

Item: Shanghai Broadcasting Equipment and Materials Plant  
[0006 3189 1684 2330 0892 2624 0617]

Location: Shanghai, PRC

Data: This plant has recently signed an agreement with the Tianjin City Television Set Plant to help the latter build a continuous production line with an annual output of 100,000 color TV sets. This project is scheduled for trial operation within a year and will be turned over for appraisal within 15 months. The total cost of the project is 4 million yuan.

Source: Shanghai JIEFANG RIBAO in Chinese 25 Aug 83 p 4



Item: Fuzhou Radio Plant No 7  
[4395 1558 3541 4848 7193 0003 0617]

Location: Fuzhou, Fujian, PRC

Data: In collaboration with the Computer Technology Institute of the Chinese Academy of Sciences, this plant developed PWM-8204 and PWM-8205 miniature switch power sources, which are used as a DC voltage regulator power source in microcomputer design and which can also be installed in precision instruments and meters and in laboratories. Weighing 0.85 kg and measuring 19x9.6x5(CM<sup>3</sup>), the PWM-8204 has an efficiency rate of 66 percent, while the PWM-8205 has an efficiency rate of 74 percent.

Source: Beijing WUXIANDIAN (RADIO) in Chinese No 8, 1983 p 13

Item: Shaanxi Color Television Tube Plant  
[7104 6007 1752 5351 7193 6018 4619 0617]

Location: Xianyang, Shaanxi, PRC

Data: This plant, China's large color television tube plant, produced more than 287,000 14- and 22-inch tubes in its first eight months with sales of 79 million yuan. The output of 14-inch tubes went up from 18,000 per month early this year to more than 61,000 per month now. In comparison with 21 other projects imported by China in 1978, the plant has been notably successful. It has begun to turn over profit to the state. The plant, with complete sets of equipment imported from Japan, has a planned annual capacity of 960,000 14- and 22-inch color tubes. The plant has paid close attention to tube quality since it went into formal production last January. Ninety-nine percent of tubes which leave the plant in perfect condition are of usable standard on arrival and customers want more.

Source: Beijing XINHUA in English 0811 GMT 22 Sep 83

Item: Jiangyoutai Plant  
[3068 3111 7835 0617]

Location: Sichuan, PRC

Data: With the support and help of units concerned, this plant recently succeeded in trial producing metallic silicon and has put it into production. The quality of its metallic silicon, also known as crystal silicon, is up to grades 1, 2, and 3 standards set by the Ministry of Metallurgy. The current monthly output is about 2,000 tons, more than sufficient to meet local needs. One of semiconductor materials that are important to the aviation and machine-building industries, metallic silicon, was not in production in Sichuan Province which had to rely on state distribution and the supply of crystal silicon was critical at times.

Source: Chengdu SICHUAN RIBAO in Chinese 17 Aug 83 p 2

Item: Changchun Institute of Optics and Fine Machinery  
[7022 2504 0342 1331 5280 4737 1378 2623 2750 4282 4496 2076]

Location: Changchun, Jilin, PRC

Data: Scientists at this institute have designed and manufactured two pieces of equipment used in remote sensing, according to the Chinese Academy of Sciences. One, a holographic concave grating, a key element in spectroscopy, is widely used in remote-sensing research and geological prospecting. The second is a ground spectral radiometer, mainly used in field surveys of geophysical spectra. It has been used in field surveys in the Xinjiang Uygur Autonomous Region and Anhui and Heilongjiang Provinces, with high optical resolution ratio and efficiency, the academy source said.

Source: Beijing XINHUA in English 0721 GMT 24 Oct 83 OW

Item: Xinjiang General Petrochemical Plant  
[2450 3984 4258 3111 0553 1562 4920 0617]

Location: 25 kilometers northeast of Urumqi, Xinjiang, PRC

Data: This plant's chemical fertilizer plant, the largest of its kind in Northwest China, is adjacent to the oil refinery with a crude oil output capacity of 1.5 million tons. It uses the residual oil from the oil refinery to make urea. The chemical fertilizer plant's building area is 160,000 square meters. Its synthetic ammonia facility is imported from Japan, while the urea facility is designed jointly by the Netherlands and China. Scheduled for completion in 1985, this large project will turn out annually 300,000 tons of synthetic ammonia and 520,000 tons of urea.

Source: Xi'an SHAANXI RIBAO in Chinese 10 Jul 83 p 4

Item: Lanzhou Petrochemical Plant  
[5695 1558 4258 0553 0617]

Location: Lanzhou, Gansu, PRC

Data: During the past 3 years, this plant, which is subordinate to the Lanzhou Chemicals Company, has implemented more than 300 technical reform projects. These technical reforms have permitted the plant to raise its output value from 155 million yuan in 1980 to 158 million yuan in 1982 and its profits from 18 million yuan to 25.5 million yuan, an increase of 41 percent.

Source: Lanzhou GANSU RIBAO in Chinese 23 Sep 83 p 2

Item: Heilongjiang Chemicals Plant  
[7815 7893 3068 0553 1562 0617]

Location: Probably Harbin, Heilongjiang, PRC

Data: Construction of this plant, the largest multi-purpose coal chemicals plant in the country, has been completed. Using coal as its primary raw material, this chemical enterprise produces, in addition to ammonium nitrate and coking coal, industrial naphthalene, pure benzene, toluene, and other raw materials needed by China's light, petroleum, and pharmaceuticals industries.

Source: Lanzhou GANSU RIBAO in Chinese 25 Aug 83 p 3

Item: Helanshan Phosphorus Mine  
[6320 5695 1472 4340 4349]

Location: Ningxia AR, PRC

Data: Construction of this mine's ore-dressing plant was started recently. Five years ago, this mine, with a design annual output capacity of 100,000 tons, was forced to suspend operation because of low phosphorus contents of its ore deposits. The phosphate fertilizer made from the ore had only 8 percent of effective phosphorus, below the state-specified standard of grade four. With a view to developing the resources of this mine, the state decided to invest 8 million yuan to build an ore-dressing plant. Upon completion, this project will have an annual ore-processing capacity of 100,000 tons and annually supply the state with 448,000 tons of concentrated phosphorus ore with a grade greater than 30 percent. The ore-dressing plant project is scheduled for completion in 1984.

Source: Yinchuan NINGXIA RIBAO in Chinese 26 Aug 83 p 1

Item: Heilongjiang Chemical Industrial Plant  
[7815 7893 3068 0553 1562 0617]

Location: Fularji District in Qiqihar City, Heilongjiang, PRC

Data: This medium-sized chemical industrial complex recently went into operation here. It has an annual capacity of 550,000 tons of coke and 120,000 tons of ammonia nitrate and some 24 kinds of chemical fertilizers.

Source: Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 2 Sep 83 SK

Item: Aiyekou Xiang Barite Plant  
[5337 0673 0656 6763 6850 2533 4258 0617]

Location: Mian Xian, Shaanxi, PRC

Data: Starting operation in early July, by 18 August, this Xiang-operated plant has produced 545 tons of barite and shipped 250 tons to the Daqing Oilfield, realizing a total income of 41,775 yuan.

Source: Xi'an SHAANXI RIBAO in Chinese 27 Aug 83 p 1

Item: Tianjin Soda Plant  
[1131 3160 4354 0617]

Location: Tianjin, PRC

Data: The State Planning Commission has recently approved the expansion plan of this plant. The expansion project, which calls for the increase of its annual output capacity from 450,000 tons to 600,000 tons, is scheduled for completion by 1986. This plant accounts for one-fourth of the country's soda ash output. When completed, this project will help the country reduce its soda ash import by 150,000 tons a year, saving \$US30 million in foreign exchange. It will also ease the shortage of soda ash in Tianjin's plate glass industry.

Source: Tianjin TIANJIN RIBAO in Chinese 29 Jul 83 p 1

Item Xinjiang Chemical Fertilizer Plant  
[2450 3984 0553 5142 0617]

Location: At the foot of the Tianshan Mountains in Xinjiang, PRC

Data: Installation of more than 300 pieces of primary equipment for the plant's synthetic ammonia facility with an annual output capacity of 300,000 tons has been completed and construction work on the main equipment for the 520,000-ton annual output capacity urea facility is progressing rapidly. Individual unit trial operations are scheduled for the second half of 1984.

Source: Chengdu SICHUAN RIBAO in Chinese 22 Aug 83 p 1

## V. FUEL AND POWER INDUSTRIES

Item: Fanggezhuang Mine Coal Dressing Plant  
[3058 0677 8369 4349 3156 3561 0617]

Location: Kailuan, Hebei, PRC

Data: The first-phase project of Fanggezhuang Mine's coal-dressing plant, the largest of its kind in the country, has gone into trial operation. The coal-dressing plant has an annual capacity of dressing 4 million tons of raw coal. The first phase project, which started in June 1980, includes the construction of a 35-meter-high coal-dressing workshop, a belt conveyor corridor from the coal shaft to the workshop, and such support facilities as water supply, electric power supply, and coal storage facilities, and a special railway. The coal-dressing workshop is equipped with complete sets of machinery and electrical equipment imported from the Federal Republic of Germany. The Fanggezhuang Mine has an annual raw coal output of around 4 million tons, the fat coal of which is excellent coking coal. The coal-dressing plant will allow the Fanggezhuang Mine to add four more dressed coal varieties for the large iron and steel mills and electric power departments in the country. Some of the dressed coal will also be exported.

Source: Shanghai JIEFANG RIBAO in Chinese 5 Jul 83 p 3

Item: Shuangyashan Power Plant  
[7175 7700 1472 4099 7193 0617]

Location: Shuangyashan, Heilongjiang, PRC

Data: The initial design of this power plant project, the first pit-mouth power plant in Heilongjiang Province, has been examined and approved, and preparations for construction have begun. Located in the center of the eastern section of the Shuangyashan mining area and surrounded by the Xinan, Qixing, and Shuangyang Coal Mines, the plant is endowed with ideal natural conditions. Its long-range plan calls for an installed capacity of 1.2 million kilowatts. When completed, it will become the "backbone" power station of the Northeast Power Network. The first-phase project will have a capacity of 400,000 kilowatts and two 200,000-KW generating units. Upon completion, the first phase project will replace the fuel oil-burning generating unit of the Xinhua Power Plant and will save for the state 450,000 tons of crude oil a year.

Source: Harbin HEILONGJIANG RIBAO in Chinese 10 Aug 83 p 1

Item: Hegang Mining Administrative Bureau  
[7729 1511 4349 0523 1444]

Location: Hegang, Heilongjiang, PRC

Data: This bureau has eight subordinate mines, including the newly built Junde Mine [1498 1795 4349], Fuli Mine [1381 0500 4349], Xinyi Mine [2450 0001 4349], Xingshan Mine [5281 1472 4349], and Nanshan Mine [0589 1742 4349]. In recent years, the bureau has provided jobs for over 50,000 young people who are children of miners by establishing small factories and service trades, such as restaurants and stores.

Source: Harbin HEILONGJIANG RIBAO in Chinese 5 Aug 83 p 1

Item: Pingdingshan Mining Area  
[1627 7307 1742 4349 0575]

Location: Pingdingshan, Henan, PRC

Data: Construction and expansion of three pairs of large modernized shafts here are in full swing. The new Drift Mine No 8 will have a design annual output of 3 million tons. It is divided into two phases of construction. The first phase project was completed in 1981 and the second phase is nearing completion. The expansion projects of Drift Mine No 4 with an annual output of 1.2 million tons and Drift Mine No 10 with an annual output of 1.8 million tons are expected to be completed by 1985 and 1986 respectively. Upon completion, these two mines will each increase their annual output by 600,000 tons. Thus in 3 to 4 years, this mining area will increase its production capacity by 3 million tons (sic). This mining area currently has 14 pairs of shafts with an annual output capacity of 14 million tons, making it a major coal mining base in Central-South China.

Source: Xi'an SHAANXI RIBAO in Chinese 29 Jul 83 p 4

[Continued on Card 2]

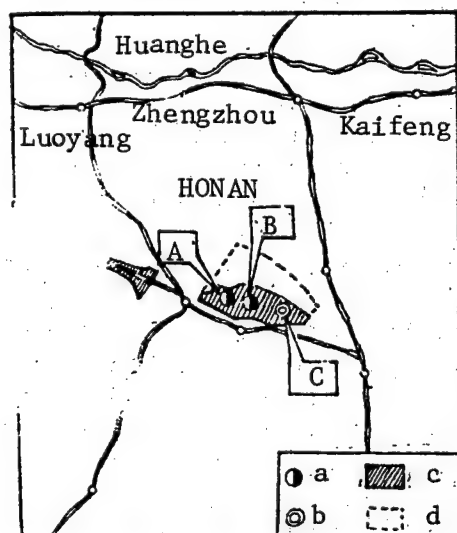


[Card 2]

Item: Pingdingshan Mining Area  
[1627 7307 1742 4349 0575]

Location: Pingdingshan, Henan, PRC

Data: Sketch Map of the Pingdingshan Mining Area in Henan



Key:

- A. Mine No 4
- B. Mine No 10
- C. Mine No 8
- a. Expanding shafts
- b. New shaft
- c. Production area
- d. Prospecting area

Source: Xi'an SHAANXI RIBAO in Chinese 29 Jul 83 p 4

Item: Yiminhe Mining Area  
[0122 2404 3109 4349 0575]

Location: Near Hailar, Inner Mongolia, PRC

Data: [1] Vice-Premier Li Peng has proposed that an electric power station be built near Hailar, Inner Mongolia, fueled by coal from a nearby open-cut mine now under development. He made the proposal during an inspection tour of this mining area earlier this month. Yiminhe is one of the five biggest open-cut mines now being developed as key energy projects. Central authorities have repeatedly stressed that power stations should be built near mines to help reduce railway and highway transportation. The mining area consists of two brown coal fields totaling 500 square kilometers in area. Their known reserves amount to more than ten billion tons. By 1998, Yiminhe will be producing an annual average of 55 million tons, according to local officials.

[2] This mining area, one of the five large open-pit coal mines in China, is covered by the state's plan for key construction projects. An earth breaking ceremony for the construction was held on 1 October. With vigorous support given by the local people of various nationalities, the construction has finally come true after 7 years of preparation.

Source: [1] Beijing XINHUA in English 1319 GMT 17 Sep 83  
[2] Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 8 Oct 83 SK

## VI. MACHINE-BUILDING INDUSTRY

Item: Changzhi Mining Machinery Plant  
[7022 3112 4349 1742 2623 2750 0617]

Location: Changzhi, Shandong, PRC

Data: Built in the 1950's, this ministry-designated production plant has been developing and manufacturing explosive charge machinery and devices for nearly 20 years. Its current products include BC-8 explosive charge vehicle and BQF-100, BQ-100 and BQ-200 explosive charge equipment series, which are now in mass production following appraisal tests conducted by the department in charge. It is currently trial manufacturing BQ-20 small-scale, jet-type explosive charge devices and is making improvements on BQ-100 non-mixing explosive charge device. These products are being used extensively by some 200 production and construction units of metal mines, transportation departments, and national defense projects. Its explosive charge equipment has become indispensable in the mechanized mining operations in the metal mine shafts. For the sake of developing the coal energy base in Shanxi, this plant is also vigorously developing coal mining machinery products. The JD-11.4 winch has been placed in batch production after the trial production appraisal so as to meet the critical coal mining needs, especially those of the small- and medium-sized coal mines and local government-operated coal mines.

Source: Luoyang KUANGSHAN JIXIE (MINING MACHINERY) in Chinese No 7, 1983 p 29

Item: State-Owned Plant No 8233  
[0948 3602 0368 0069 0006 0006 0617]

Location: PRC

Data: In cooperation with the Heilongjiang Institute of Electronics Technology, this numbered plant designed and developed a KB Series automatic packaging and sealing machine for "massive" objects, which has been put into limited production. The packaging and sealing speed is 40-80 boxes/minute; packaging and sealing dimensions are: length, 60-270mm; width, 30-140 mm, and height, 15-84mm. Weight of object being packaged and sealed is 350g; operating environmental temperature is 20 $\pm$ 5°C; and relative humidity is 5 percent.

Source: Beijing WUXIANDIAN (RADIO) in Chinese No 8, 1983 p 13

Item: Xintai Electric Cable Plant  
[2450 3141 7193 4968 0617]

Location: Xintai County, Shandong, PRC

Data: Scientific and technical personnel of this plant have developed two "new" product varieties--high and low voltage underground electric cables--for the rural areas. In 1982, after a number of experiments, they succeeded in using high-pressure polyethylene as insulation material and polyvinyl chloride as covering material to make low voltage underground electric cable (1 kilovolt) and in 1983, they also successfully trial produced high voltage (10 kilovolts) underground armored electric cable. The development of these two products helps to eliminate the use of poles and save farmland for crops. Last year, the plant turned out 1,400 kilometers of the underground electric cables. This year it has received orders for 2,000 kilometers of cables, an increase of 42.5 percent over 1982.

Source: Jinan DAZHONG RIBAO in Chinese 10 Aug 83 p 1

Item: Heilongjiang Communication Electric Cable Plant  
[7815 7893 3068 6639 6061 7193 4968 0617]

Location: Yuquan, Heilongjiang, PRC

Data: The high-grade electric cables produced here arrived in Xizang from the Yuquan Railway Station in July. This batch of rural telephone cables measuring 40 kilometers in length were ordered in mid-May by the Xizang Autonomous Region's Postal and Telecommunications Bureau at a national postal and telecommunications products fair. The electric cables produced in Heilongjiang are sold to 17 provinces, municipalities, and autonomous regions in the country.

Source: Harbin HEILONGJIANG RIBAO in Chinese 9 Aug 83 p 1

Item: Changcheng Electric Elevator Plant  
[7022 1004 7193 2748 0617]

Location: Shanghai, PRC

Data: In 1983, this plant has received orders for the export of 121 elevators. The contracts call for the delivery of 67 elevators this year, six times greater than the number actually exported last year. Eight of the elevators have been delivered during the first half of 1983. In its early years, the plant turned out only 2-ton passenger/cargo lifts. Now it is producing six different types of elevators, with loading capacity ranging from 100 kilograms to 5 tons.

Source: Shanghai JIEFANG RIBAO in Chinese 13 Aug 83 p 1

Item: Dongfang Electromachinery Plant  
[2639 2455 7193 2623 0617]

Location: Sichuan, PRC

Data: One of the large enterprises manufacturing large power generating equipment in the country, this plant is turning out about 50 percent of the generating equipment needed by the key energy projects in China. It has signed contracts with the Datong Power Plant in Shanxi and the Jinzhou Power Plant in Liaoning for steam turbo-generators, each with single-unit capacity of 200,000 kilowatts. Despite the rise in costs resulting from technical modifications demanded by the users, the plant still maintained the original equipment prices agreed upon in the contracts. To date, this plant has provided 10 key engineering projects with 22 sets of generating equipment and has never arbitrarily charged the customers the additional costs.

Source: Chengdu SICHUAN RIBAO in Chinese 5 Aug 83 p 1

Item: Harbin Bearings Plant  
[0761 1422 3453 6519 2110 0617]

Location: Harbin, Heilongjiang, PRC

Data: This plant's newly built miniature centripetal bearings production line with an annual output capacity of 6 million sets was put into operation on 10 August. This project will produce 200-203 series bearings for household appliances and miniature electric motors, which are in short supply in the market. The key equipment of the production line was imported from Japan, while some of the special equipment was manufactured domestically.

Source: Harbin HEILONGJIANG RIBAO in Chinese 20 Aug 83 p 1

Item: Xi'an Electric Cable Plant  
[6007 1344 7193 6031 0617]

Location: Xi'an, Shaanxi, PRC

Data: In July this year, this plant signed a contract to supply 319 kilometers of communication cables for the electrification of the Beijing-Qinhuangdao Railway. The contract calls for the delivery of 140 kilometers of electric cable within this year, but by July it has delivered 20 kilometers of communication cable. For such expeditious delivery, the higher authorities and units concerned commended this plant.

Source: Xi'an SHAANXI RIBAO in Chinese 27 Aug 83 p 1

Item: Xinhua Internal Combustion Engine Plant  
[2450 5476 0355 3595 2623 0617]

Location: Mianyang Prefecture, Sichuan, PRC

Data: By carrying out technical reforms and improving its management system to raise its "enterprise quality," this plant was able to achieve better economic results. Its 1982 output value registered an increase of 39.2 percent; its comparable product cost dropped 13.2 percent; and its profit showed an increase of 7.85 times as compared to 1981. During the first half of this year, its production cost continued to decrease and output value continued to rise, making it possible to realize a profit 2.35 times greater than that of the same 1982 period. An old factory manufacturing diesel engines, this plant has trial manufactured three series, including S195 and 190 series, 20 modified product models, marsh gas/diesel engines for the rural areas, light and heavy diesel engines, and double fuel tank diesel engines. Employing 31 engineers and technicians, who form the backbone of this enterprise, the plant earned for the state more than \$US300,000 through the export of its products in 1982.

Source: Chengdu SICHUAN RIBAO in Chinese 17 Aug 83 p 2

Item: Xinchengzi Machinery and Power Equipment Plant  
[2450 2052 1311 2894 2750 0520 0500 6080 0271 0617]

Location: Xinchengzi, Liaoning, PRC

Data: This plant has manufactured an explosion-proof electric battery powered locomotive for underground operations in coal mines. Liaoning in Northeast China is one of the major coal producers in the country. At present such locomotives in China can only run in underground passages where there is no gas. Coal has to be transported from the work-faces by handcart in some places. The new locomotive will replace these handcarts. In another technical development, an electronic pull testing machine has been evolved by the Wuzhong Miniature Testing Instrument Plant in the Ningxia Hui Autonomous Region, Northwest China. The device can be used to test the tensile strength and the extension rate of metal wires and foils within a measuring range between 5 grams and 100 kilograms. The results are indicated by number on a screen.

Source: Beijing XINHUA in English 0743 GMT 9 Sep 83 OW

Item: Shenyang Water Pump Plant  
[3476 7122 3055 3119 0617]

Location: Shenyang, Liaoning, PRC

Data: Construction of China's largest water pump experimental base is being speeded up here. The foundation for an experimental pond and a laboratory building have been finished. Construction began in July last year and is scheduled to be put into operation in 1985. The 15.9 million yuan state project includes a workshop producing large water pumps for thermal power generating units above 300,000 kilowatts, an experimental pond with a capacity of 5,500 cubic meters, five platforms and four laboratories. It is being built in this plant, the largest of its kind in China. The plant produces 276 varieties of pumps for industrial, railway and agricultural use. Some of its products are exported to a dozen countries and regions.

Source: Beijing XINHUA in English 0819 GMT 29 Sep 83 OW

Item: Chengqu Machinery Plant  
[1004 0575 2623 2750 0617]

Location: Yinchuan City, Ningxia, PRC

Data: Effective 1 September 1983, this plant has been renamed Shuguang Machinery Plant [2562 0342 2623 2750 0617]. The source carries an announcement to this effect. Among other services, this plant installs water heating systems and equipment and manufactures sports equipment and steel flag poles.

Source: Yinchuan NINGXIA RIBAO in Chinese 1 Sep 83 p 1

Item: Jiamusi General Harvester-Combine Plant  
[0163 2606 2448 5114 0678 2392 0480 2623 4920 0617]

Location: Jiamusi, Heilongjiang, PRC

Data: The 43 JL-1065 grain harvester-combines trial built by this plant by using technologies imported from the United States are sold out. This plant plans to trial manufacture 50 of these machines in 1983. The prototype has been tested in the Beijing suburbs and Xinjiang.

Source: Harbin HEILONGJIANG RIBAO in Chinese 25 Aug 83 p 1

Item: Heyang Xian Agricultural Machinery Repair and Manufacturing Plant No 2  
[0678 7122 4905 6593 2623 0208 6644 1708 0617]

Location: Heyang County, Shaanxi, PRC

Data: This plant recently developed and manufactured an automatic feeding flour mill that requires only one operator. The small, fuel-saving, and easy-to-operate machine can process 130 catties of wheat an hour and is quite popular among the rural users.

Source: Xi'an SHAANXI RIBAO in Chinese 27 Aug 83 p 1



Item: Qingtongxia County Agricultural Machinery Bureau  
[7230 6894 1499 4905 6593 2623 1444]

Location: Qingtongxia County, Ningxia, PRC

Data: As of the end of December 1982, there were 1,486 hand-guided tractors in Qingtongxia County. To meet the peasants needs, the County Agricultural Machinery Bureau dispatched personnel to organize the supply of goods in Yinchuan, Wuzhong, and Shaanxi Province and shipped in 140 hand-guided tractors, 140 1-ton trailers, and 170 accessories. In addition, they produced in Qingtongxia County 1,400 small-sized sowers and 100 small-sized shellers.

Source: Yinchuan NINGXIA RIBAO in Chinese 10 Aug 83 p 2

Item: Sanyuan Xian Machine-Drawn Agricultural Implements Plant  
[0005 0626 4905 2623 1714 6593 0367 0617]

Location: Sanyuan County, Shaanxi, PRC

Data: In cooperation with the Shaanxi Agricultural Machinery Research Institute, this plant has developed and manufactured two types of light plows for the "small hand-guided tractors" and "small four-wheel tractors"--Shaanxi 123 bidirectional (grid) single share plow and Shaanxi 220 suspension double share plow. Following repeated tests and improvements, the two products are now in batch production at this plant.

Source: Xi'an SHAANXI RIBAO in Chinese 10 Jul 83 p 1

Item: Jixing Commune-Run Farm Implements Manufacturing and Repair Plant  
[0679 5281 0361 4357 6593 0367 0208 6644 0617]

Location: Boli County, Heilongjiang, PRC

Data: A kind of hand-operated corn sheller for household use has recently been trial produced by this plant. Weighing 7 kilograms, this type of corn sheller can shell 200 catties of maize an hour. This structurally simple and easy to use sheller is priced at 17 yuan. Batch production of the farm tool is now under way.

Source: Harbin HEILONGJIANG RIBAO in Chinese 24 Aug 83 p 2

Item: Pingdingshan Polyester Cord Fabrics Plant  
[1627 7307 1742 6930 4858 1588 1311 1580 0617]

Location: Pingdingshan, Henan, PRC

Data: This project, China's first polyester cord fabrics factory, today went into production here following examination by a government committee since October 13. Consisting of representatives of the Henan Provincial Government and the Ministry of Textile Industry, the committee considered the factory as up to the designed standards through examining its designing, construction, installation of equipment, technological processes, labor protection and economic performances. The factory, using Japanese and Chinese equipment, is designed to produce 13,000 tons of cord fabrics used in tires a year. Construction of the factory began in April 1980. More than 16,000 tons of cord fabrics have been produced since the factory went into trial operation in October 1981.

Source: Beijing XINHUA in English 1912 GMT 15 Oct 83

Item: State-owned Plant No 504  
[0948 3602 0063 7190 0934 0617]

Location: Probably Lanzhou, Gansu, PRC

Data: This 20-year-old numbered plant has been commended for its excellent educational and technical training programs for the staff members and workers. Its successful experiences were introduced at the recent meeting of advanced representatives in education called by the Gansu Provincial National Defense Scientific Work Office. The training programs and classes and educational centers conducted and set up by the plant have proved to be extremely important as evidenced by an increasing number of newly trained workers who are ably filling the vacant positions left by the retired and transferred veteran workers.

Source: Lanzhou GANSU RIBAO in Chinese 25 Aug 83 p 2

Item: Benxi Cement Plant  
[2609 3005 3055 3136 0617]

Location: Benxi, Liaoning, PRC

Data: This plant's No 3 Kiln and its support facilities have been completed and have recently undergone trial operations. This project is China's largest cement production line that employs the new external disintegration method. It has a daily cement clinker output of 1,200 tons and is currently the cement production line with the highest output, lowest heat consumption, and the best economic returns in the country.

Source: Shenyang LIAONING RIBAO in Chinese 28 Sep 83 p 1

Item: Guangzhou Synthetic Fiber Plant  
[1684 1558 0678 2052 4960 4850 0617]

Location: Guangzhou, Guangdong, PRC

Data: Construction of this plant project officially started 8 July. Complete sets of equipment for this project are imported from West Germany. It is expected to be completed by the end of 1984. The annual output capacity is 2,000 tons of dacron filaments.

Source: Guangzhou GUANGZHOU RIBAO in Chinese 8 Jul 83 p 1

Item: Xi'an Chemical Fiber Plant  
[6007 1344 0553 4960 0617]

Location: Xi'an, Shaanxi, PRC

Data: This plant's expansion project, which has been delayed because of "disputes over trifles," has recently been stepped up. This plant produces dacron short filaments. Upon completion of the expansion project, it will increase its output from the present 1,000 tons to around 10,000 tons. "Comprehensive" production capacity is expected to take shape by the end of 1983.

Source: Xi'an SHAANXI RIBAO in Chinese 11 Jul 83 p 1

Item: Shanghai Ramie Experimentation Plant  
[0006 3189 5389 7802 1395 7526 0617]

Location: Shanghai, PRC

Data: Construction of this plant, China's first ramie sulfonating denaturation and experimentation plant, started 26 June 1983 in the Taopu Industrial Zone. The total building area is close to 8,000 square meters. The first phase project is scheduled for completion in May 1984. Hemp fiber expert Feng Yunhe spent several decades conducting research on ramie "denaturation" and finally developed a new ramie denaturation technology. He won a State award for his achievement in May 1981. This plant was established with the approval of the State Scientific Commission.

Source: Shanghai WEN HUI BAO in Chinese 26 Jun 83 p 1

Item: Harbin Textile Dyeing Plant  
[0761 1422 3453 4791 4930 2676 0617]

Location: Harbin, Heilongjiang, PRC

Data: The second phase project of this plant includes the 44,000-square-meter main building for the dacron-cotton subplant, the 25,000-square-meter principal building for the bleaching and dyeing subplant, the 9,000-square-meter built-in power station, and other support facilities. The total building area is 120,000 square meters and the investment cost is 120 million yuan, doubling that of the first-phase project. When completed, the whole plant project will become the largest textile dyeing complex in Heilongjiang Province.

Source: Harbin HEILONGJIANG RIBAO in Chinese 14 Aug 83 p 1

Item: Nanshu Graphite Mine  
[.... .... 4258 1075 4349]

Location: Lanxi County, Shandong, PRC

Data: A graphite slurry production line making coatings for color television tubes has gone into operation here. Technology and equipment for the line at this mine were imported from Japan. The line, China's first, is designed to produce 100 tons of graphite coatings each year. Besides domestic consumption, some of the products will be exported. Construction of the 3.5 million U.S. dollar project began in April last year.

Source: Beijing XINHUA in English 0744 GMT 6 Sep 83

Item: Mangya Asbestos Mine  
[5413 1509 4258 2758 4349]

Location: Mangya, Qinghai, PRC

Data: An asbestos ore dressing plant at this mine has gone into trial operation two years ahead of schedule. The plant has an annual production capacity of 12,000 tons. The Mangya deposit, China's largest, is located in the Qaidam Basin. It has an estimated reserve of 30 million tons, more than one-third of the country's known reserves. The high-grade asbestos fibers produced in Qinghai are sold on both the domestic and foreign markets.

Source: Beijing XINHUA in English 0740 GMT 22 Oct 83

Item: Dandong Chemical Fiber Plant  
[0030 2639 0553 1331 4960 4850 0617]

Location: Dandong, Liaoning, PRC

Data: The newly-built nylon branch factory of this plant was put into production in the morning of 14 October. Cutting ribbon for the opening of the factory were Peng Xiangsong, deputy governor of Liaoning Province, and (Xin Duo), director of the Chemical Fiber Bureau under the Ministry of Textile Industry. The planned targets call for a design annual output capacity of 2,000 tons of artificial silk, 44 million yuan of annual output value and 13 million yuan of profits a year.

Source: Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 14 Oct 83 SK

Item: Zhongba Specialty Cement Plant  
[0022 1100 3676 4467 3055 3136 0617]

Location: Mianyang Prefecture, Sichuan, PRC

Data: The first phase project of this plant has gone into operation. With an annual output of 7,000 tons, this project turns out white cement 325 and 425 with at least 80 degrees of whiteness. Converted from a powder metallurgy plant run by Zhongba Zhen this plant is funded and managed by the Zhongba Zhen People's Government and the Mianyang Prefecture Building Materials Bureau. Net profits derived from product sales will be divided between the Zhongba Zhen People's Government and the Mianyang Prefecture Building Materials Bureau on a 70 percent and 30 percent basis.

Source: Chengdu SICHUAN RIBAO in Chinese 17 Aug 83 p 2

Item: Acheng Textile Printing and Dyeing Plant  
[7093 1004 4791 4930 0603 2676 0617]

Location: Acheng County, Heilongjiang, PRC

Data: Effective 2 August 1983, with the approval of the Heilongjiang Economic Commission, this plant has been renamed the Heilongjiang Textile Printing and Dyeing Plant [7815 7893 3068 4791 4930 0603 2676 0617]

Source: Harbin HEILONGJIANG RIBAO in Chinese 7 Aug 83 p 4



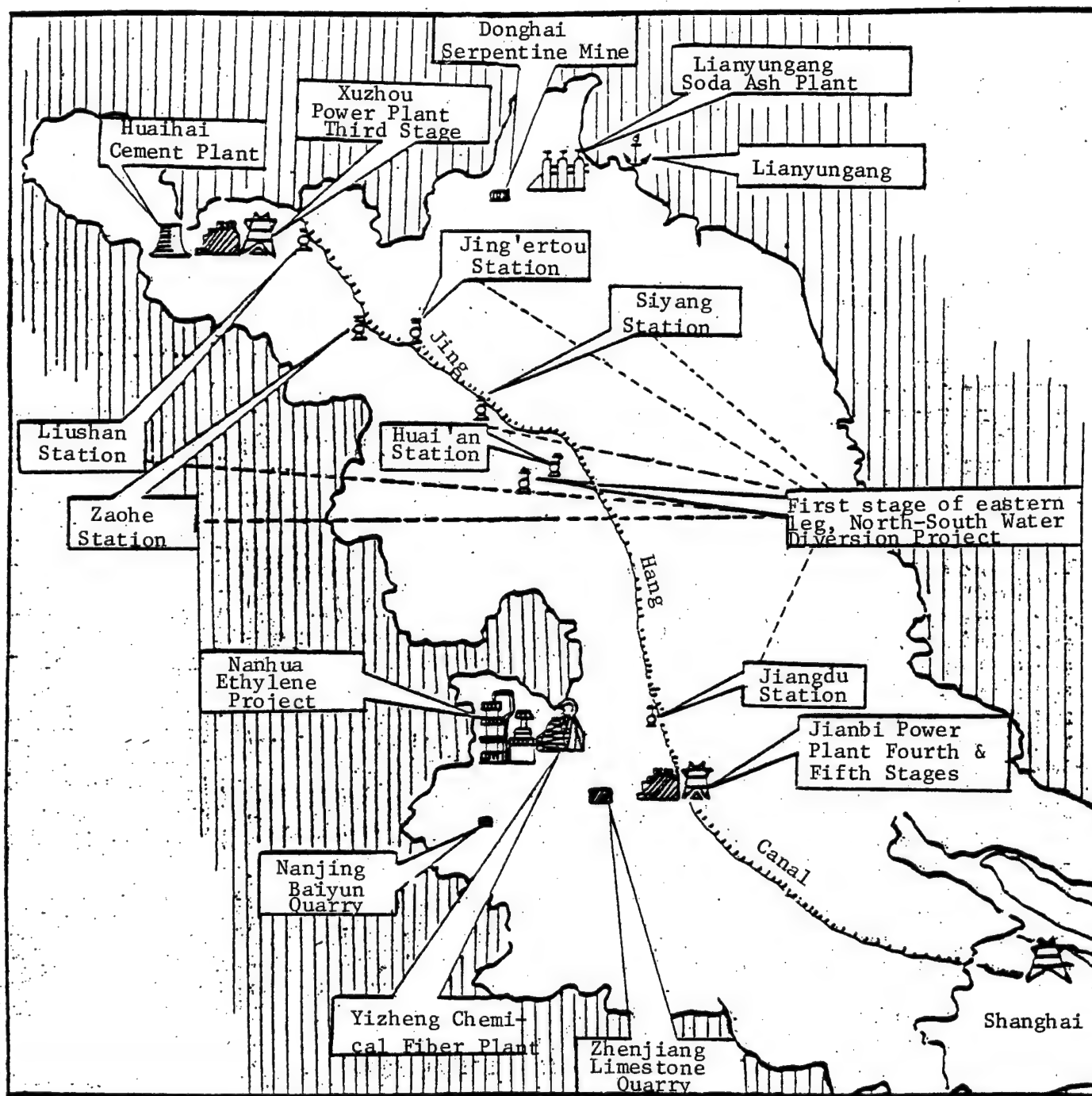
Item: Zhongshan Xian Sugar Mill  
[0022 1472 4905 4743 0617]

Location: Zhongshan County, Guangdong, PRC

Data: A 15-ton capacity ferroconcrete boat belonging to the Masha Farm subordinate to this sugar mill, loaded with clay bricks, sank near the People's Bridge of Guangzhou while sailing from east to west at 12:30 p.m. on 13 April. The three crew members were rescued. The department concerned is organizing salvage work.

Source: Guangzhou GUANGZHOU RIBAO in Chinese 14 Apr 83 p 1

Sketch Map of Ten Key Projects the State Is Building in Jiangsu Province



Source: Nanjing XINHUA RIBAO in Chinese 17 Aug 83 p 1

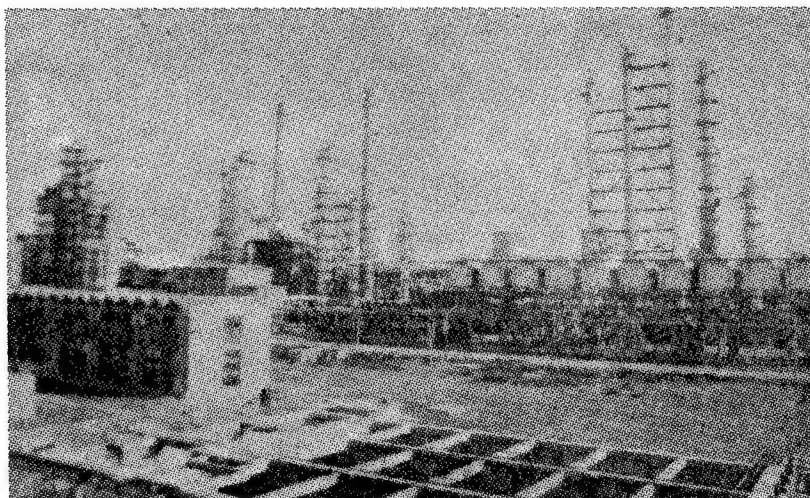


Fig. 1 External view of a combined refining facility at the Shijiazhuang Oil Refinery

[Source: Shijiazhuang HEBEI RIBAO in Chinese 4 Oct 83 p 1]

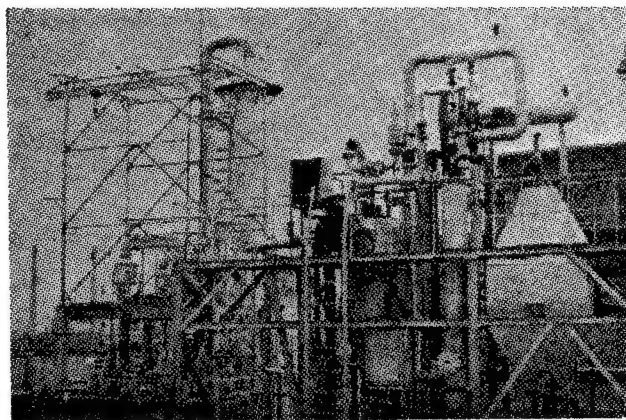


Fig. 2 Workers of the polyvinyl workshop of the Lanzhou Petrochemicals Plant built on their own a tail gas recovery facility which permits the shop to recover annually gasoline methanol gas worth more than 1 million yuan. Photo shows an external view of the recovery facility.

[Source: Lanzhou GANSU RIBAO in Chinese 17 Sep 83 p 1]

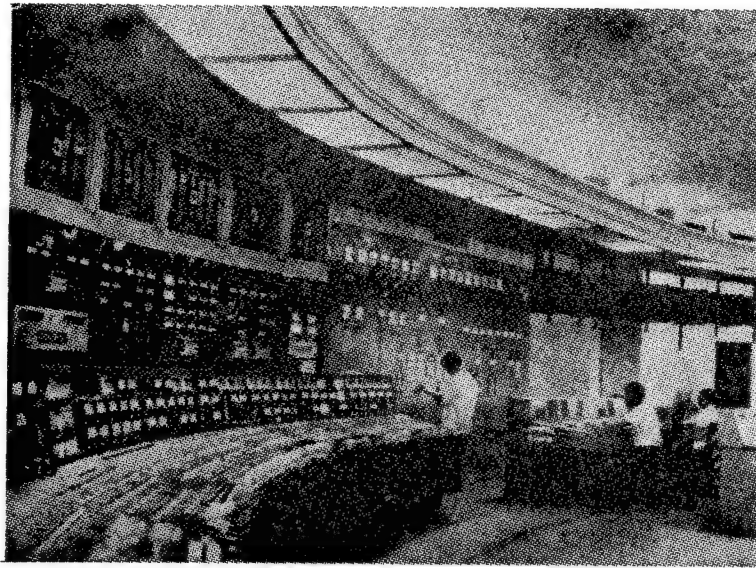


Fig. 3 Photograph of the central integrated circuit control room of the Jiujiang Power Plant No 2 in Jiangxi. This plant has changed its operation to burning coal instead of oil during the first half of 1982. Its second-phase project, the 25,000-KW No 1 generating unit started operation on 31 July 1983.

[Source: Beijing GONGREN RIBAO in Chinese 12 Aug 83 p 1]

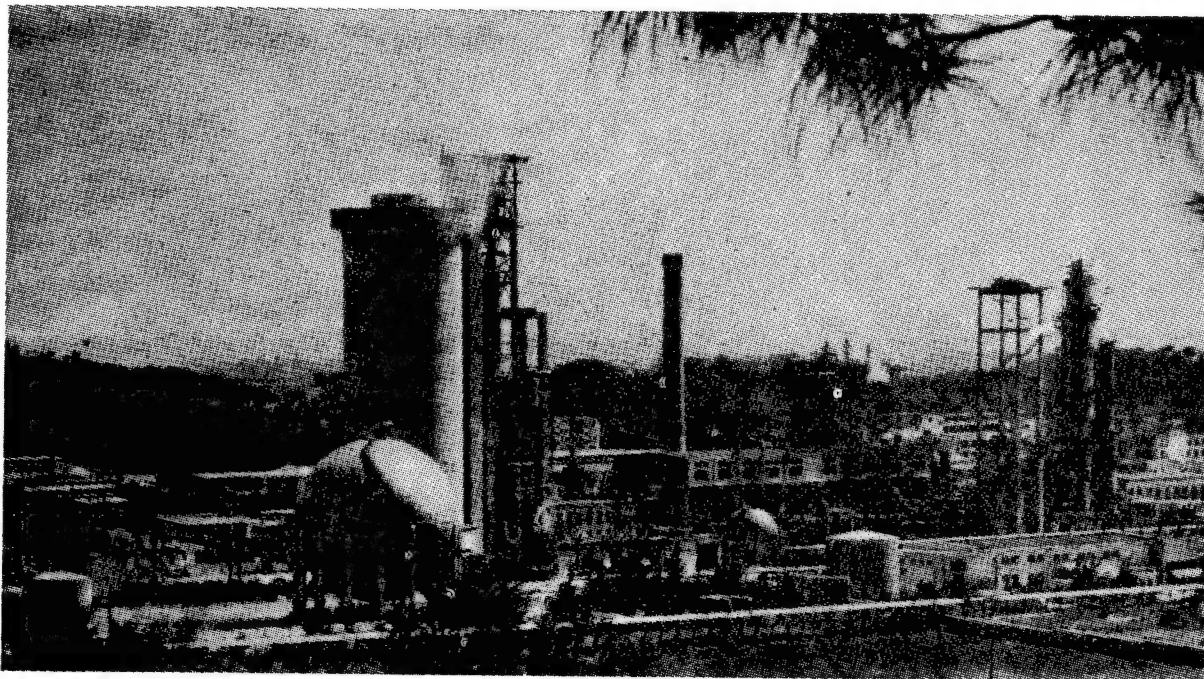


Fig. 4 External view of the synthetic ammonia and urea facilities at the Guangzhou Petrochemicals Plant

[Source: Guangzhou GUANGZHOU RIBAO in Chinese 31 Jul 83 p 4]

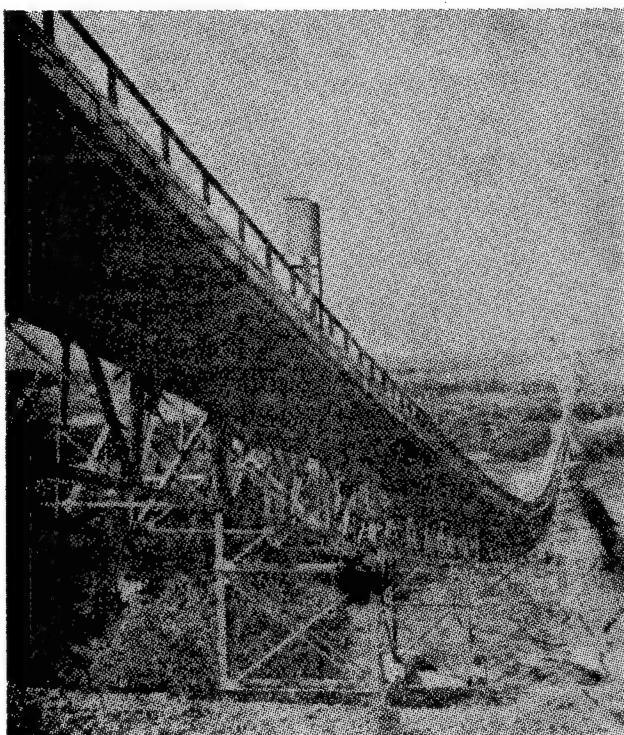


Fig. 5 Photo of the 9.8 kilometer-long conveyor belt, the longest in China's building materials industry, in Tangshan City, Hebei. It is operated by the Qidong Cement Plant, the country's biggest cement producer.

[Source: Beijing GONGREN RIBAO in Chinese 10 Aug 83 p 2]



Fig. 6 The 53-kilometer-long trunk rail line from Taiyuan to the Dongqu, Xiqu, and Zhenchengdi Mines in the Gujiao Mining Zone, Shanxi, has been completed.

[Source: Harbin HEILONGJIANG RIBAO in Chinese 8 Sep 83 p 4]

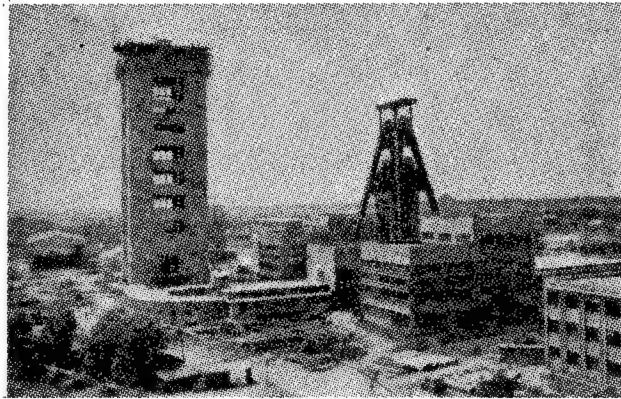


Fig. 7 The main shaft tower of the Baodian Mine in the Yanzhou Coal mining base in Shandong was completed ahead of schedule in early August 1983. Up to this point, the ground surface project of the large shaft with a design annual output of 3 million tons has been completed. The Baodian Shaft is scheduled for completion next year.

[Source: Harbin HEILINGJIANG RIBAO in Chinese 8 Sep 83 p 4]

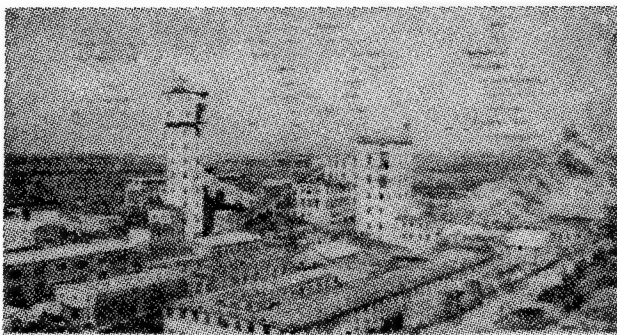


Fig. 8 View of the Xiaonan Mine of the Tiefa Coal Mine in Liaoning. The mine has a design annual output capacity of 900,000 tons.

[Source: Harbin HEILONGJIANG RIBAO in Chinese 28 Aug 83 p 4]





Fig. 9 The Shanghai Xinhua Radio Plant, which is subordinate to the Ministry of Space Industry, is turning out civilian products. Photo shows a recently built receiver-recorder continuous production line at the plant.

[Source: Beijing GONGREN RIBAO in Chinese 29 Aug 83 p 3]

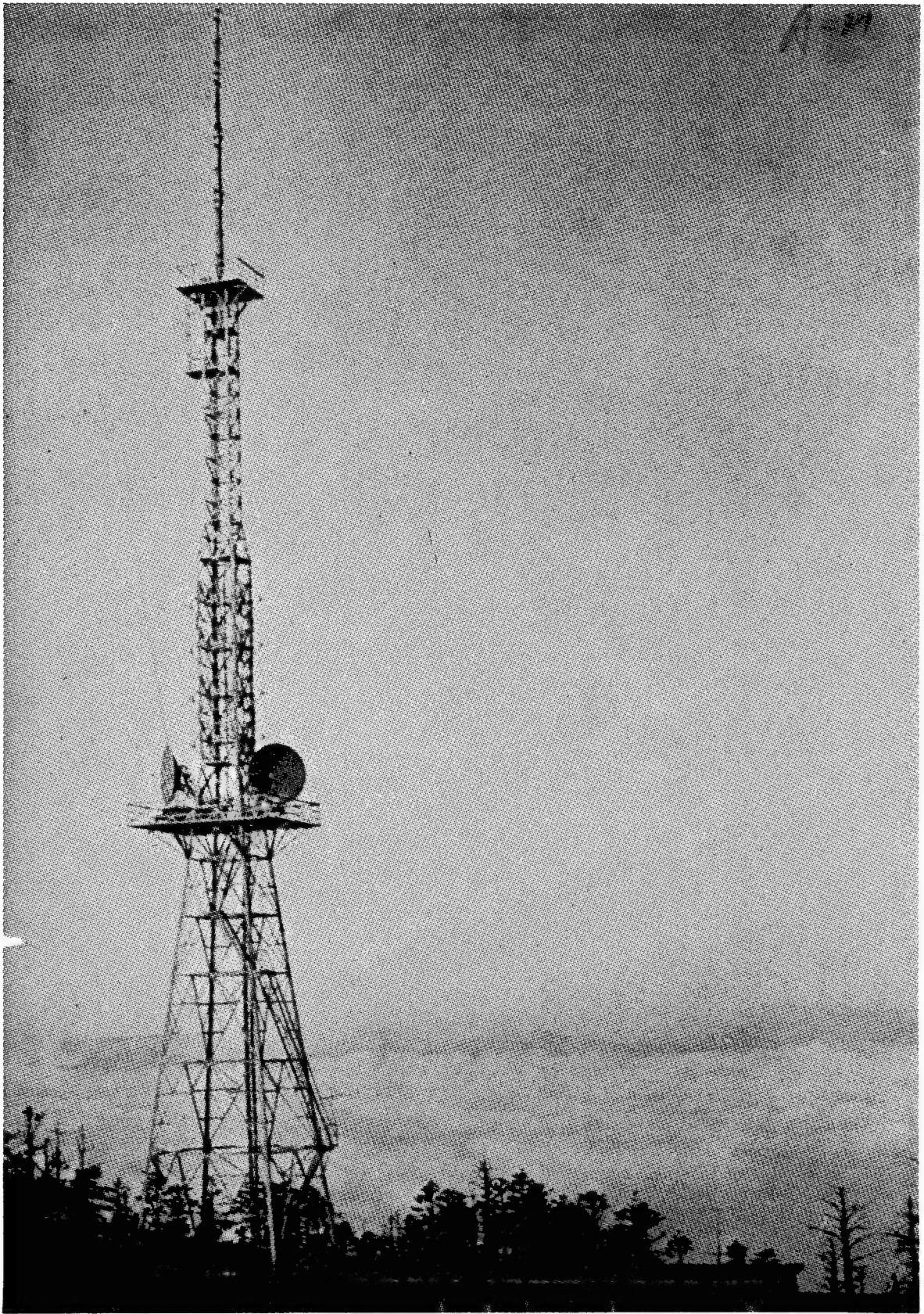


Fig. 10 Microwave television broadcast relay antenna on top of Omei Mountains in Sichuan.

[Source: Beijing XIANDAIHUA (MODERNIZATION) in Chinese No 9, 1983, backcover]



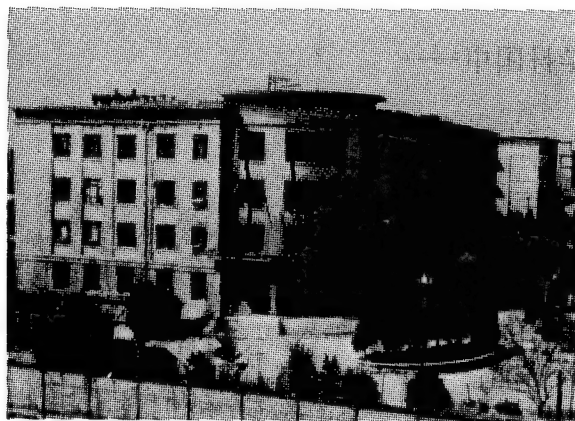


Fig. 11 Distant view of the laboratory building of the Xi'an Optical Machinery Institute which has turned out a number of advanced high-speed cameras.

[Source: Beijing XIANDAIHUA (MODERNIZATION) in Chinese No 8, 1983  
inside backcover]

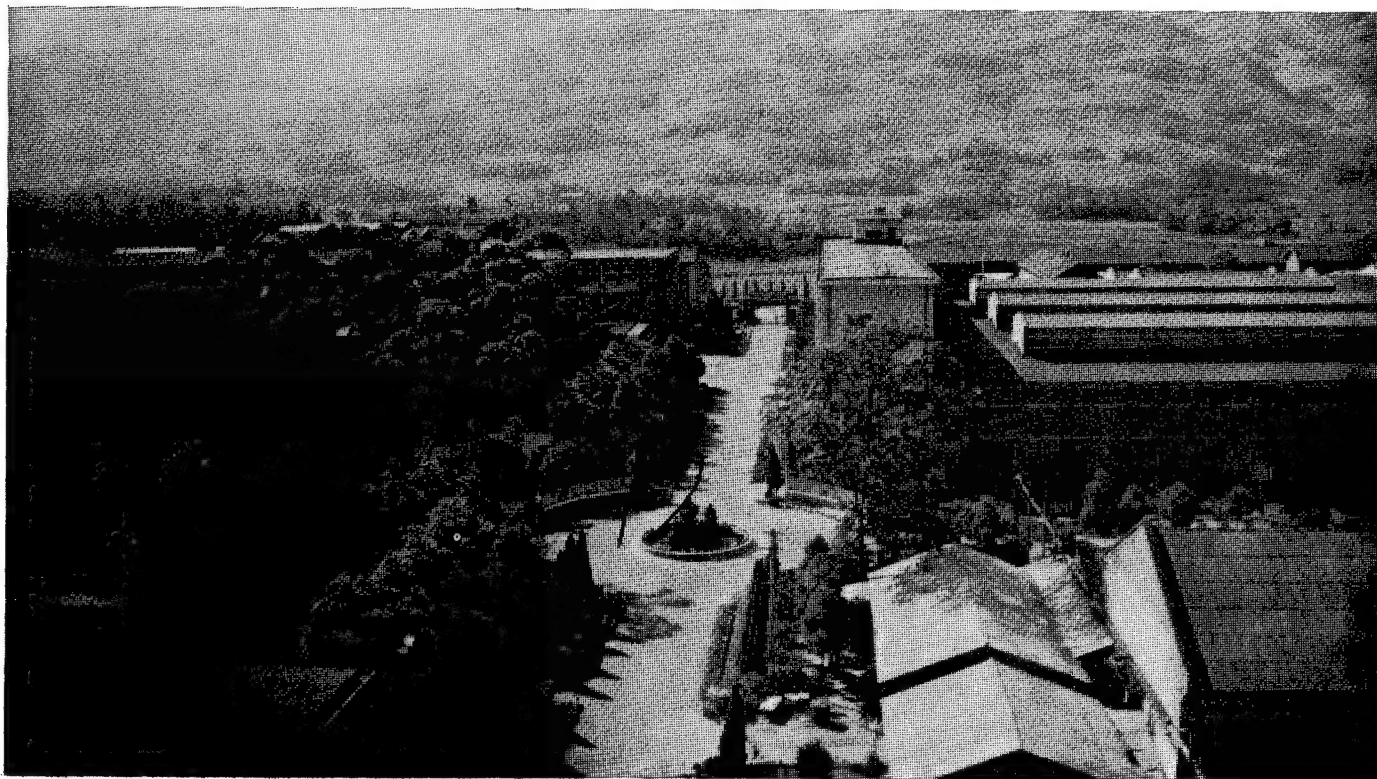


Fig. 12 View of the Ningjiang Machine Tool Plant in Guan Xian, Sichuan. A key factory producing high-precision instruments and meter-machine tools, the plant is equipped with 550 metal cutting machine tools and employs more than 3,000 staff members and workers. Its annual output is 1,700 units. The plant produces six kinds of machine tools, i.e., medium and small size high-precision jig borer, jig grinder, single-axis longitudinal lathe, small module gear cutting machine, universal measuring machine, polishing machine or instrument and meter shaft, micro-aggregate machine tool (such as character or line engraving, dividing, etc.). Its new product series include single column optical jig borers model TG 4120B, TG 4132B and TG 4145B.

[Source: Beijing JICHUANG (MACHINE TOOL) in Chinese No 8, 1983, backcover]

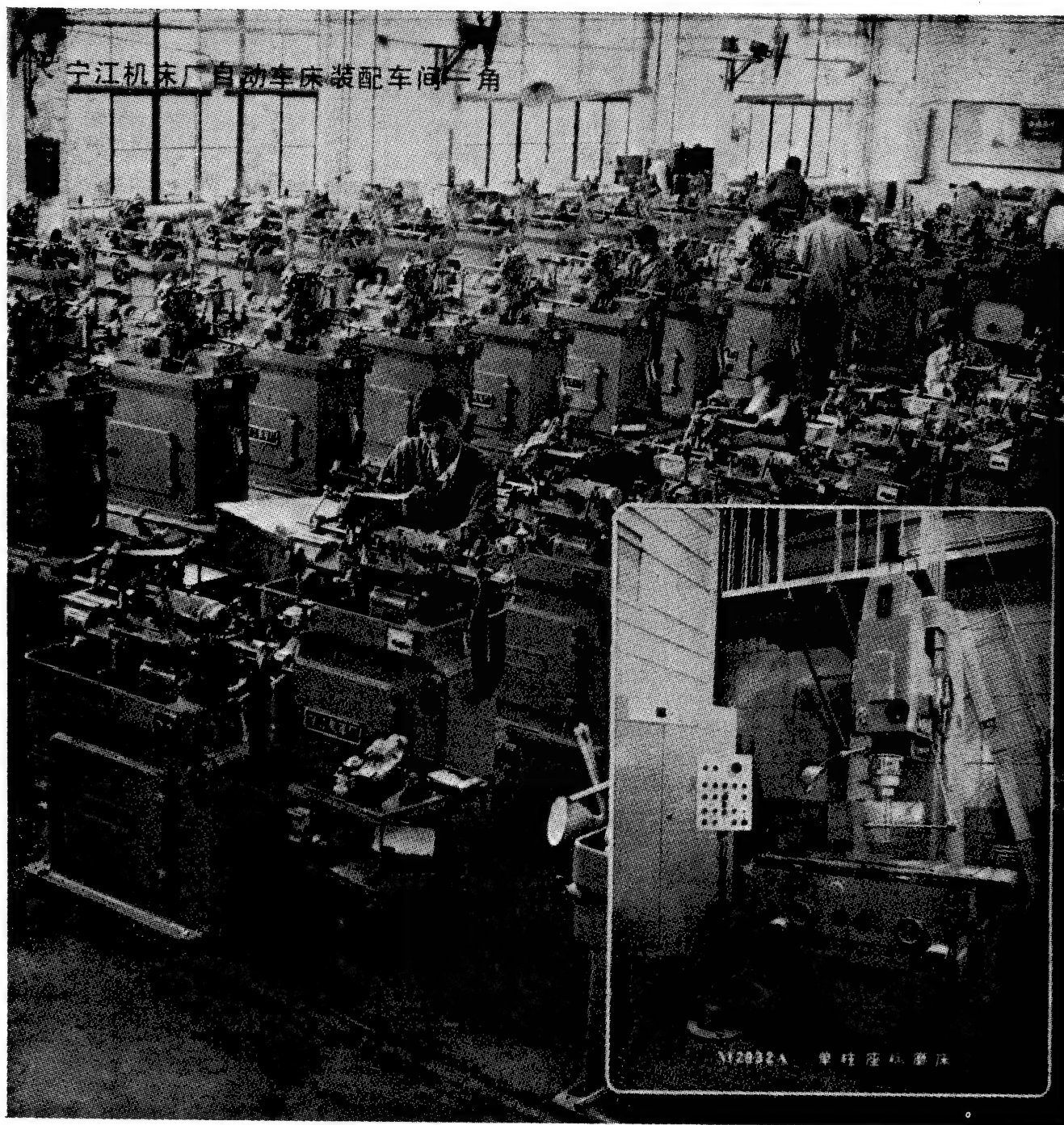


Fig. 13 A sectional view of the Ningjiang Machine Tool Plant's automatic lathe assembly shop

[Source: Beijing JICHUANG (MACHINE TOOL) in Chinese No 8 1983, front cover]

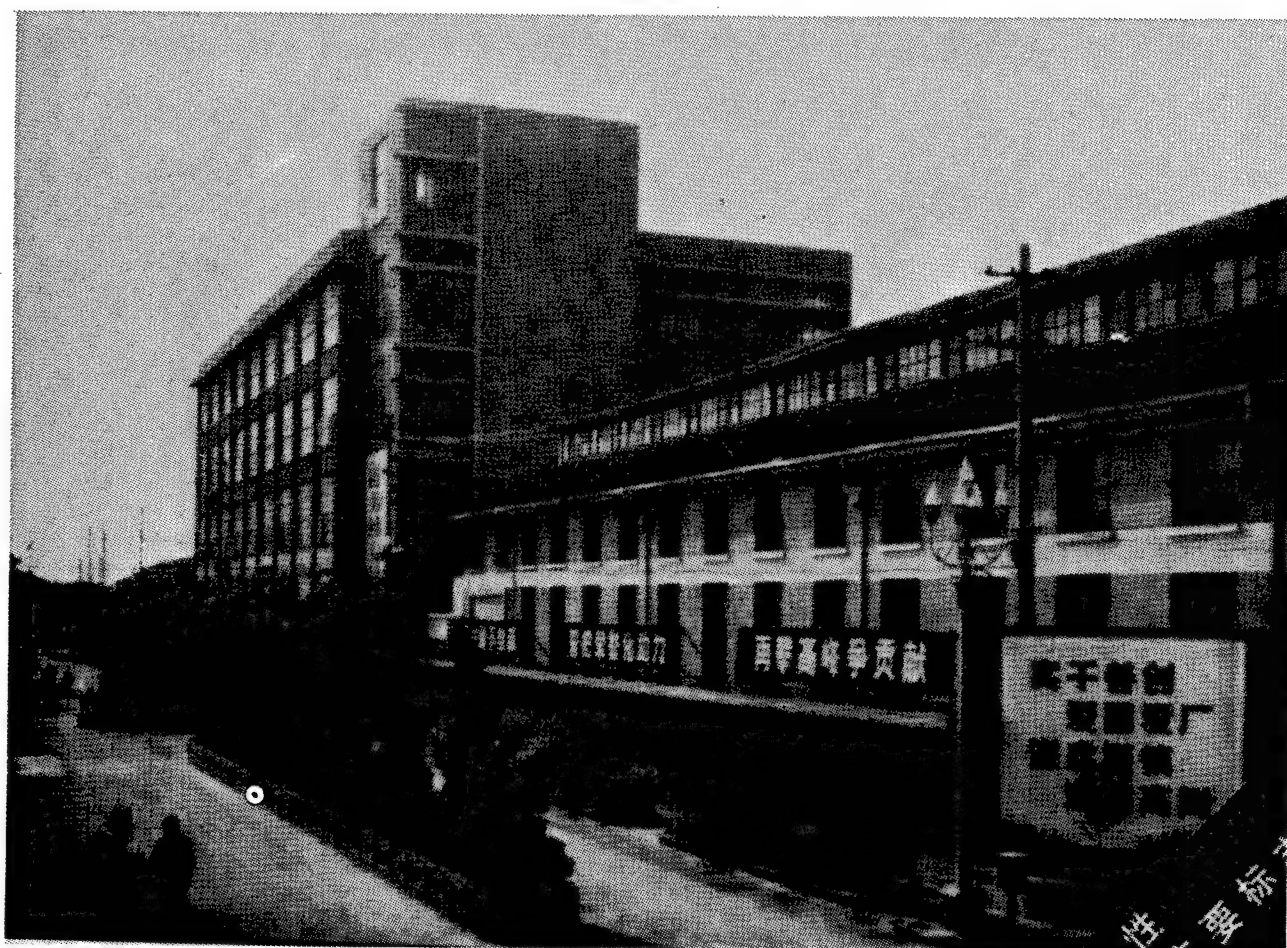


Fig. 14 Photograph of the Changzhou Diesel Engine Plant in Jiangsu

[Source: Beijing ZHONGGUO ZHILIANG GUANLI (QUALITY CONTROL IN CHINA)  
in Chinese No 8, 1983, front cover]

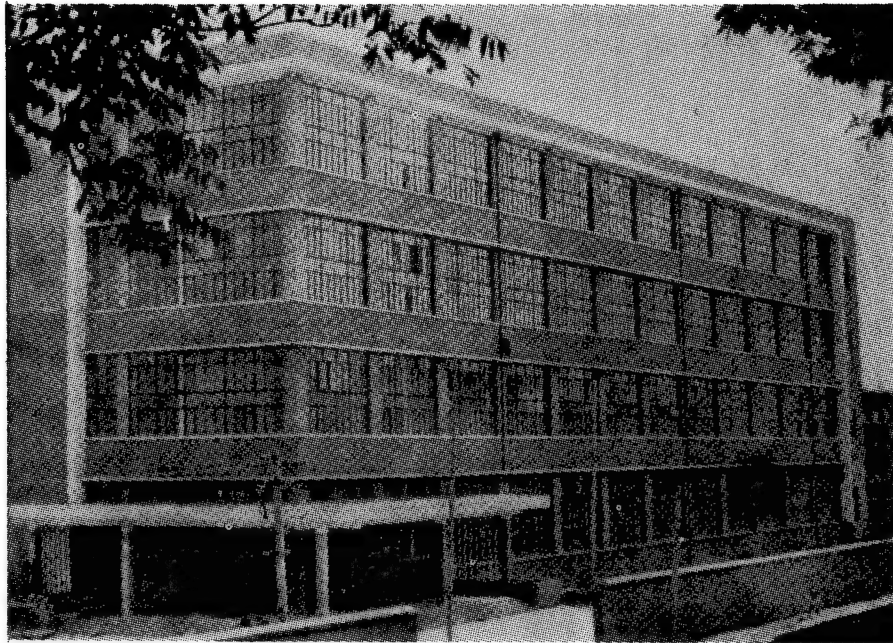


Fig. 15 View of the State-owned Honghua Instruments Plant in Xi'an City, Shaanxi

[Source: Beijing DIANZI KEXUE JISHU (ELECTRONIC SCIENCE & TECHNOLOGY) in Chinese No 8, 1983, back cover]



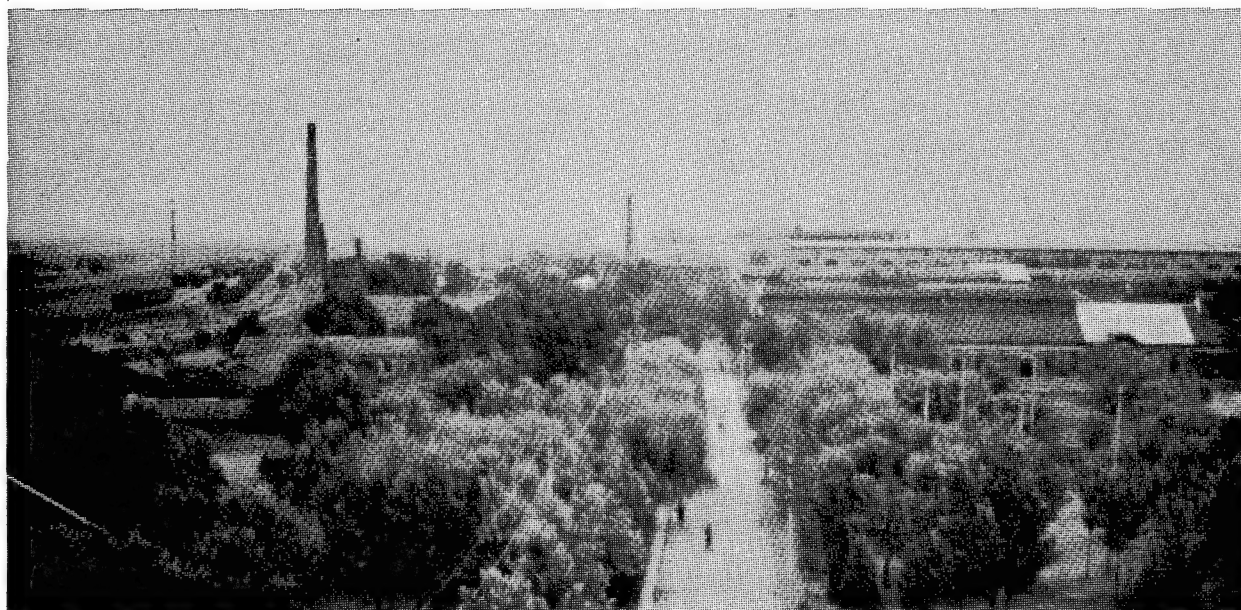


Fig. 16 Photograph of the Dezhou General Machine Tool Plant in Dezhou City, Shandong. One of the key lathe manufacturing enterprises in the country, this plant, formerly known as the Dezhou Metal Workshop, began manufacturing machine tools in 1952. It changed to the present name in 1958. Employing 2,300 people, 138 of whom are technicians, the plant has an annual output capacity of 2,000 lathes. Its main products are series T21 deep hole drilling machine and series M41 deep hole honing machine.

[Source: Beijing JICHUANG (MACHINE TOOL) in Chinese No 7, 1983  
back cover and p 48]

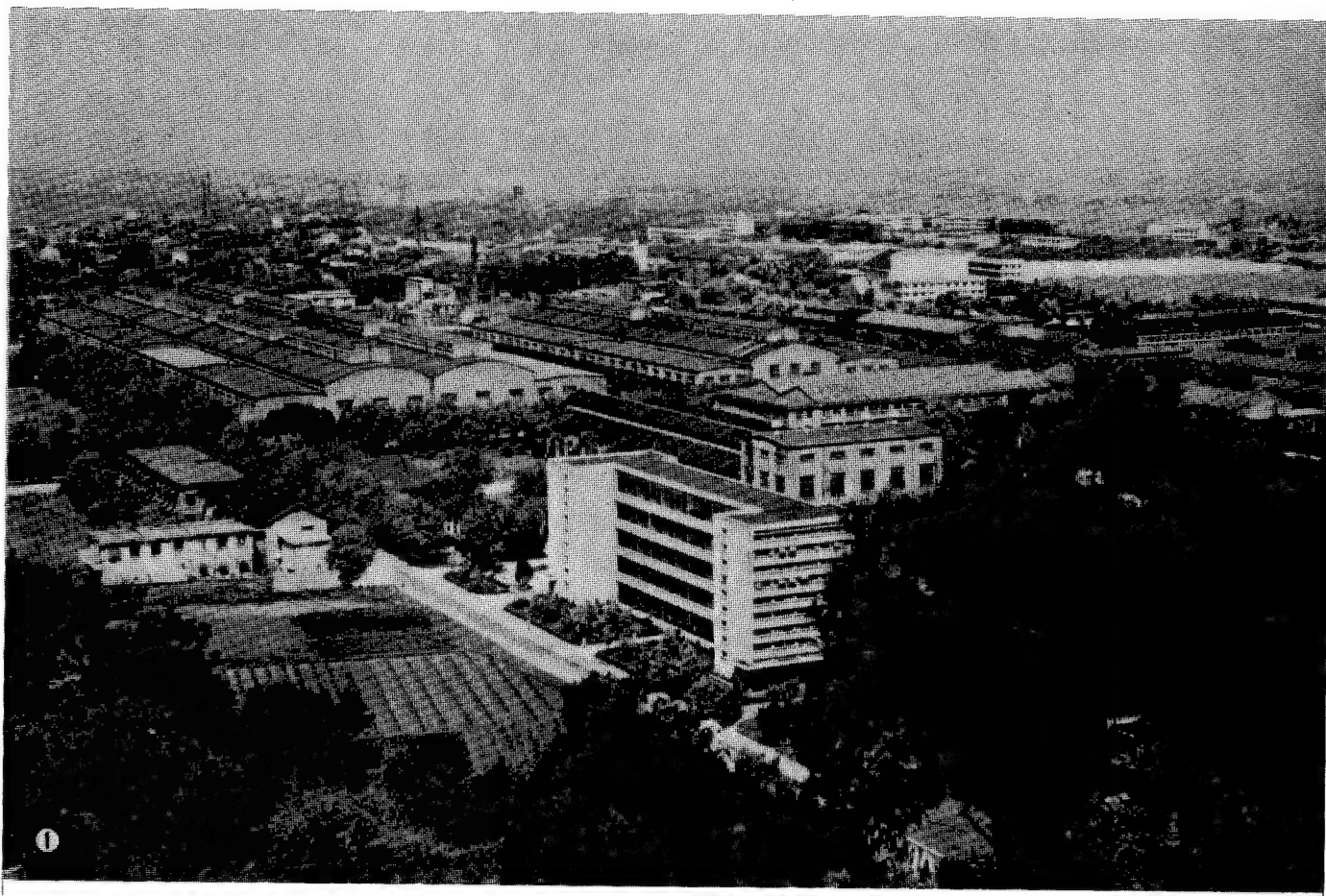


Fig. 17 View of the Hangzhou Generating Equipment Plant in Xiaoshan, Zhejiang. Established in 1956, this plant specializes in manufacturing mainly medium- and small-size generating equipment and produces various kinds of hydroelectric generating equipment with water head 2-400m, voltage 400-10,500V, power rating 7-50,000 kw and steam turbo-generators with power rating 750-6,000 kw, and well as medium and small-size synchronous induction motors with power rating 22-6,300 kw. It employs nearly 3,000 skilled workers.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 23]



Fig. 18 Photo of the Hangzhou Boiler Plant in Zhejiang. A key enterprise under the Ministry of Machine-Building Industry, this plant produces waste heat boilers and covers an area of 350,000 square meters. In the past 30 years, this highly mechanized plant has turned out approximately 4,000 sets of boilers.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 24]



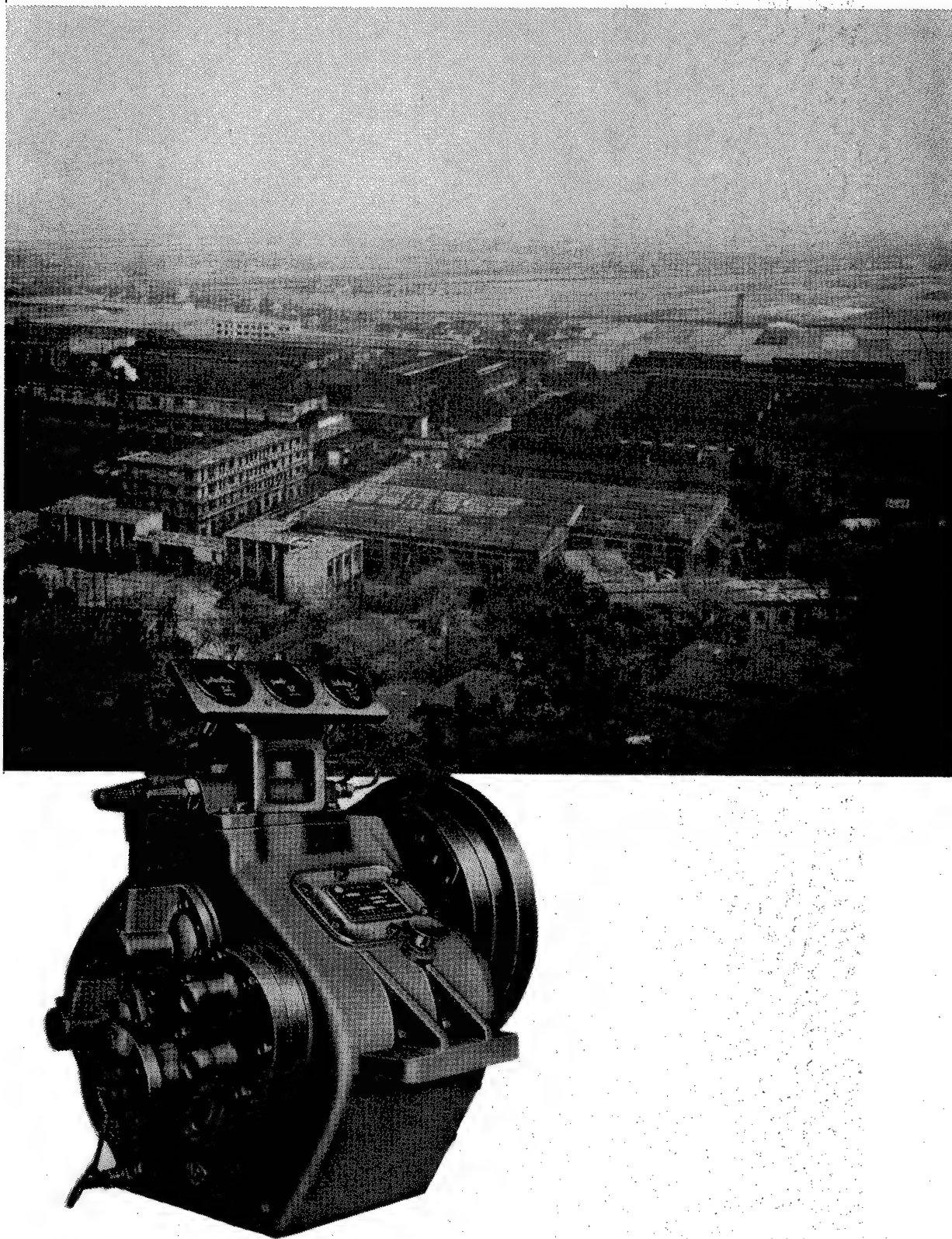


Fig. 19 View of the Hangzhou Gearbox Plant in Xiaoshan, Zhejiang. This plant is a key enterprise specializing in manufacturing marine gearboxes, gears for agricultural machinery, as well as sintered powder metal products. It is equipped with high precision gear manufacturing machines and up-to-date measuring and testing equipment.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 50]

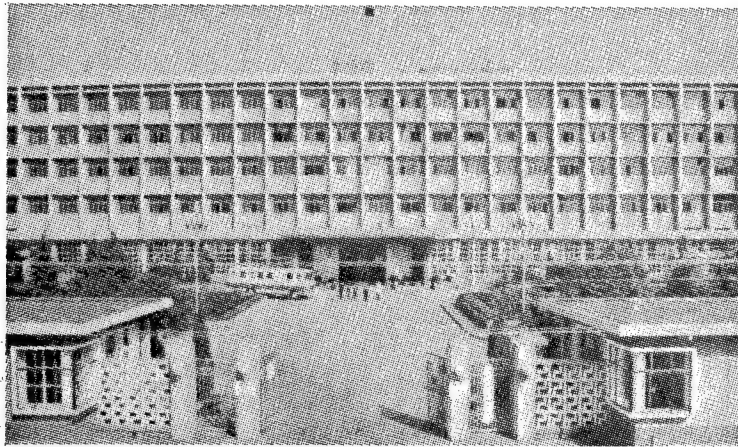


Fig. 20 The General Machinery Research Institute in Hefei, Anhui Province. This is a general and chemical machinery research organization directly under the Ministry of Machine-Building Industry. It is a comprehensively polytechnical research base and measuring-testing center with numerous specialties and advanced levels. Established in Beijing in 1956 and relocated at Hefei in 1969, the institute employs nearly 900 staff members and workers. It has 15 research departments with 23 specialties and a sizable experimental factory.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 54]

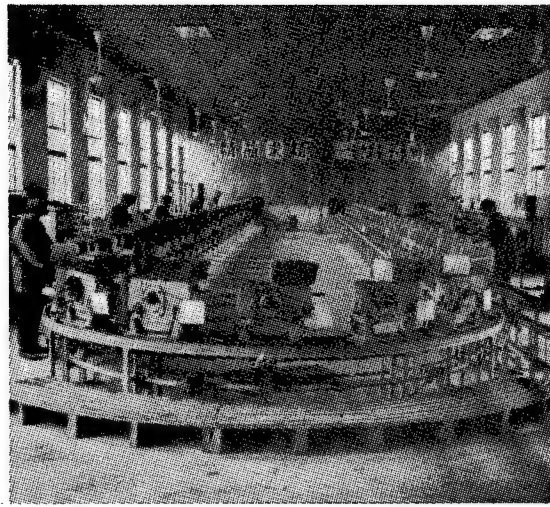


Fig. 21 Inside of an assembly workshop of the Wuhu Diesel Engine Plant in Anhui. Its principal products, 195 A 12 hp, 195 B 13 hp, and 1100 15 hp diesel engines, are used as power units for walking tractors, small 4-wheeled tractors, small draining and irrigating equipment, agricultural processing machinery, small generators, air generators, air compressors, 1-ton tipcart, forklift trucks, and small ships.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 67]

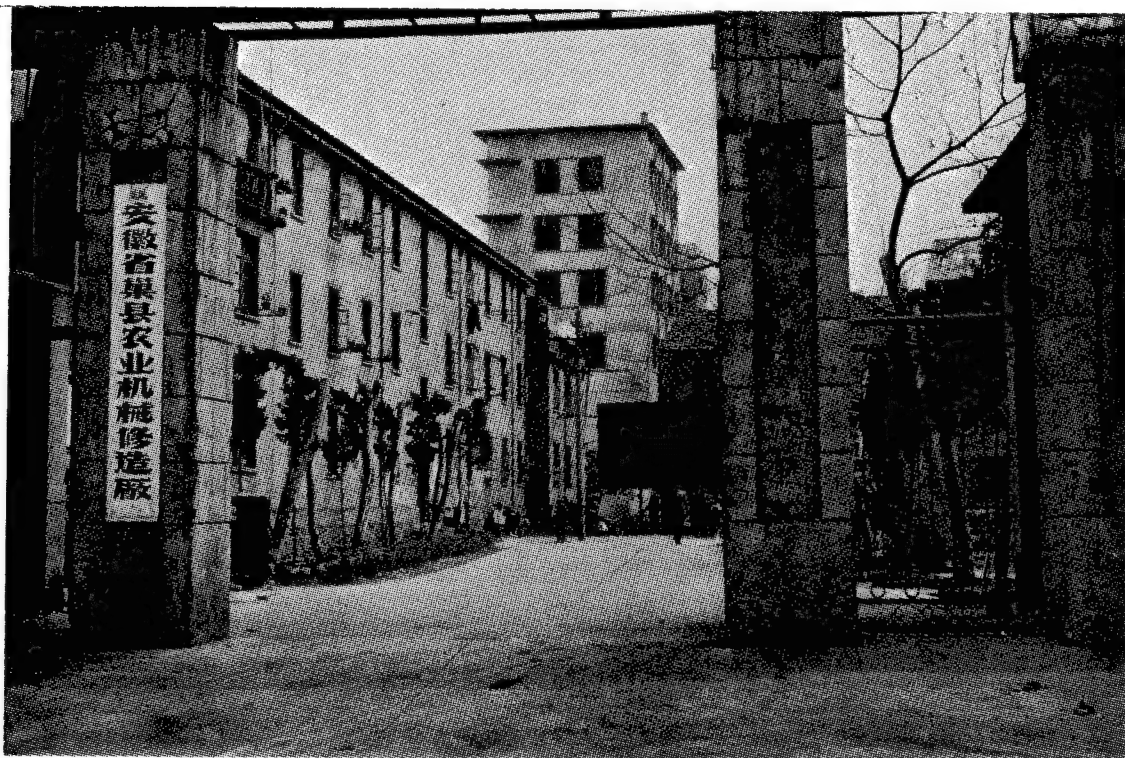


Fig. 22 Photograph of the Chao Xian Agricultural Machinery Plant in Anhui. Model WN5-4 mixed flow pump is one of its principal products.

[Source: Hong Kong ZHONGGUO JIXIE SHEBEI (CHINA MACHINERY & EQUIPMENT) in Chinese and English No 2, 1983 p 70]

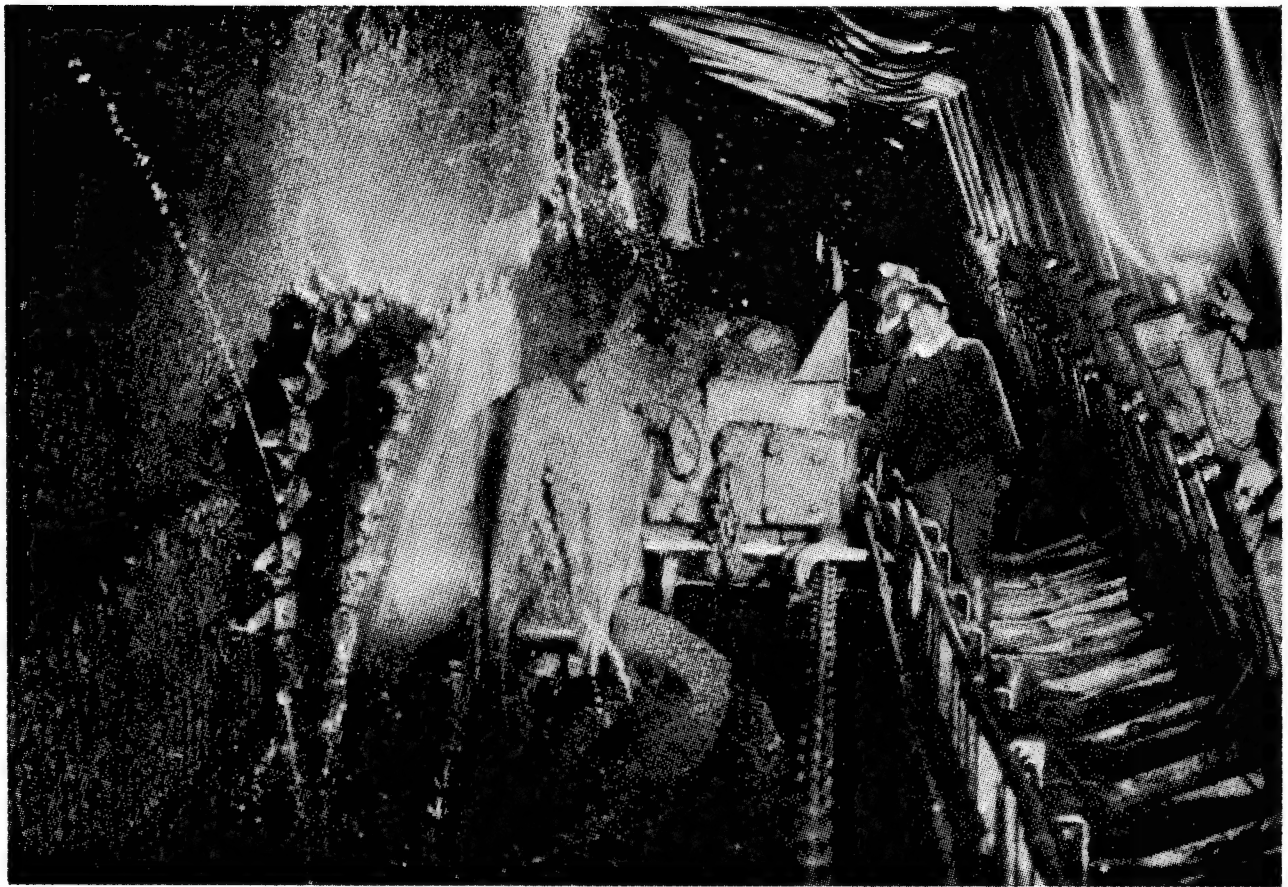


Fig. 23 Photo showing an underground unit prospecting for coal in the Qixing Mine of Shuangyashan in Heilongjiang.

[Source: Harbin HEILONGJIANG HUABAO (HEILONGJIANG PICTORIAL) in Chinese No 3, 1983 p 24]



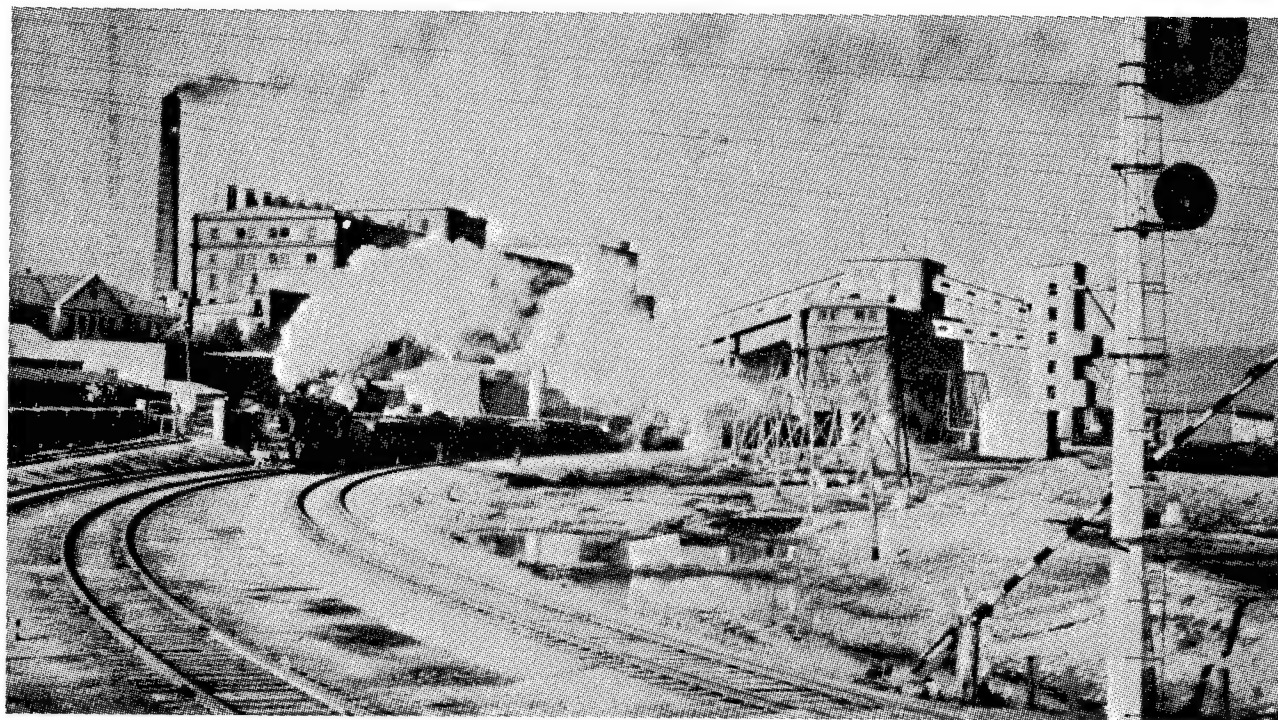


Fig. 24 A view of the coal-dressing plant in Shuangyashan, Heilongjiang

[Source: Harbin HEILONGJIANG HUABAO (HEILONGJIANG PICTORIAL) in Chinese No 3, 1983 p 24]

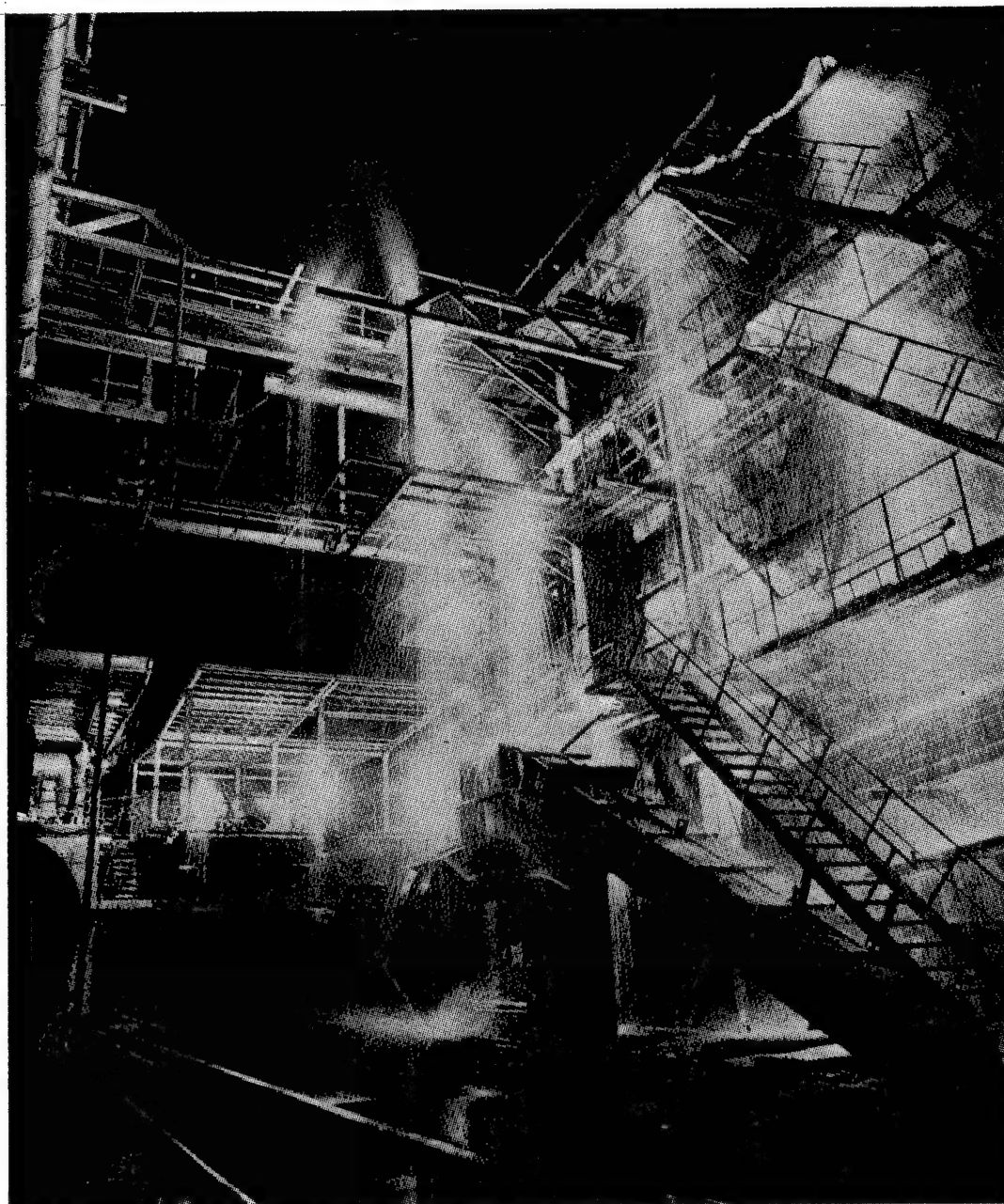


Fig. 25 The Xunjiansi Power Plant is the largest thermal power plant in the Diannan Prefecture, Yunnan Province. Photo shows its No 4 boiler being installed.

[Source: Kunming YUNNAN HUABAO (YUNNAN PICTORIAL) in Chinese No 4, 1983 p 12]

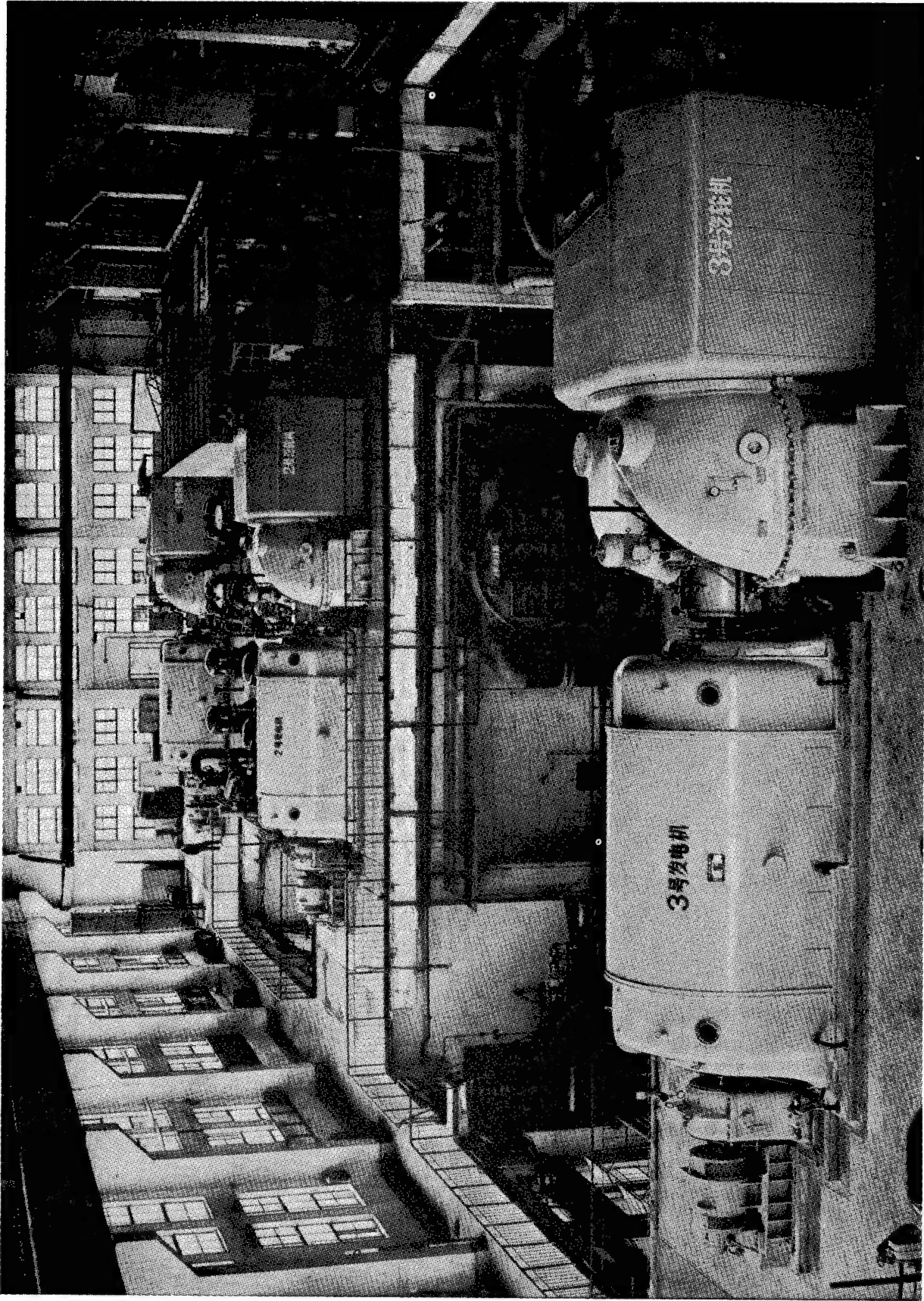


Fig. 26 Inside view of the steam turbine workshop of the Xunjiansi Power Plant.

[Source: Kunming YUNNAN HUABAO (YUNNAN PICTORIAL) in Chinese No 4, 1983 p13]



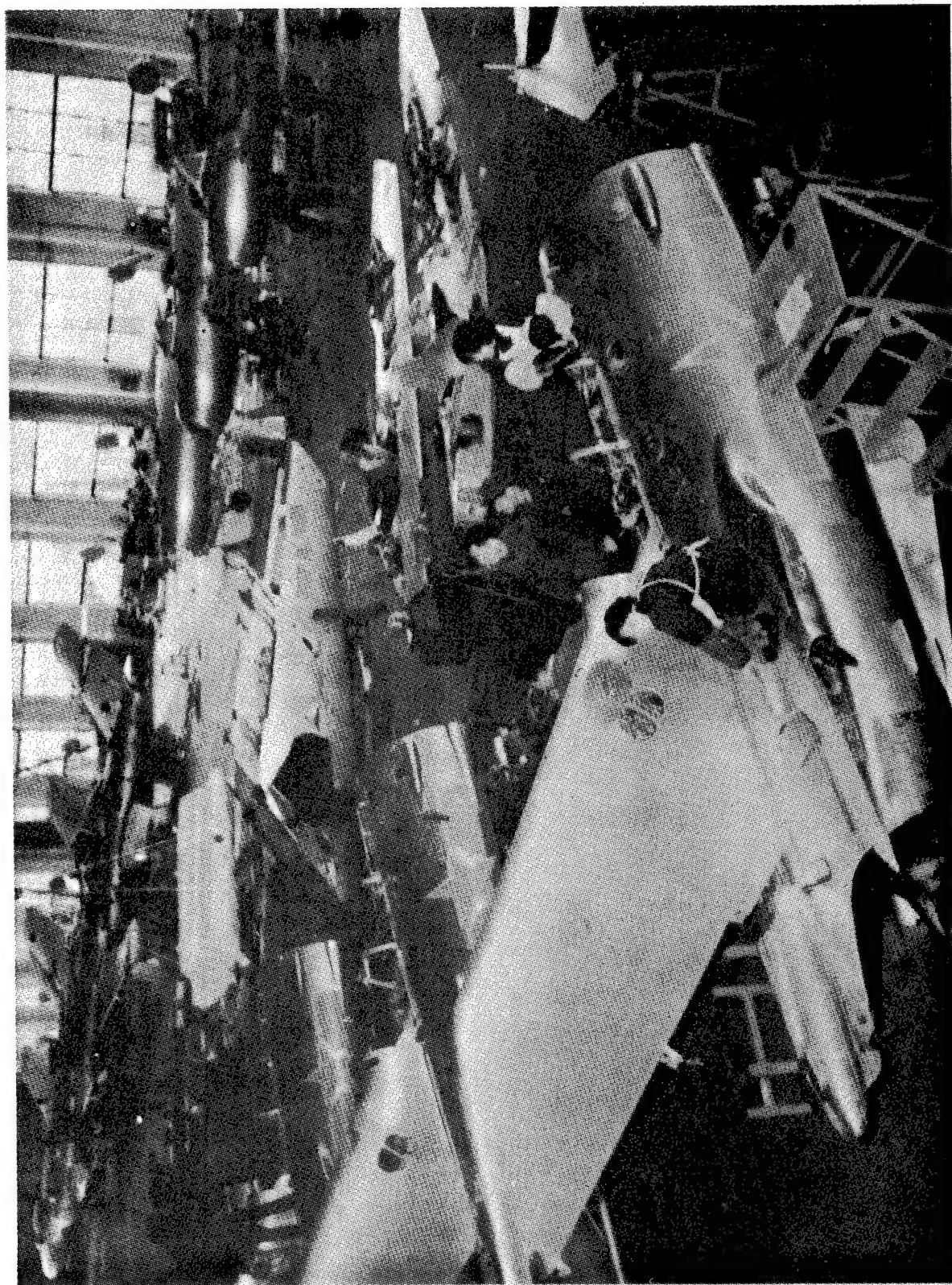


Fig. 27 Inside view of a subplant of an unidentified aircraft repair factory.

[Source: Changsha HUNAN HUABAO (HUNAN PICTORIAL) in Chinese No 8, 1982 p 1]

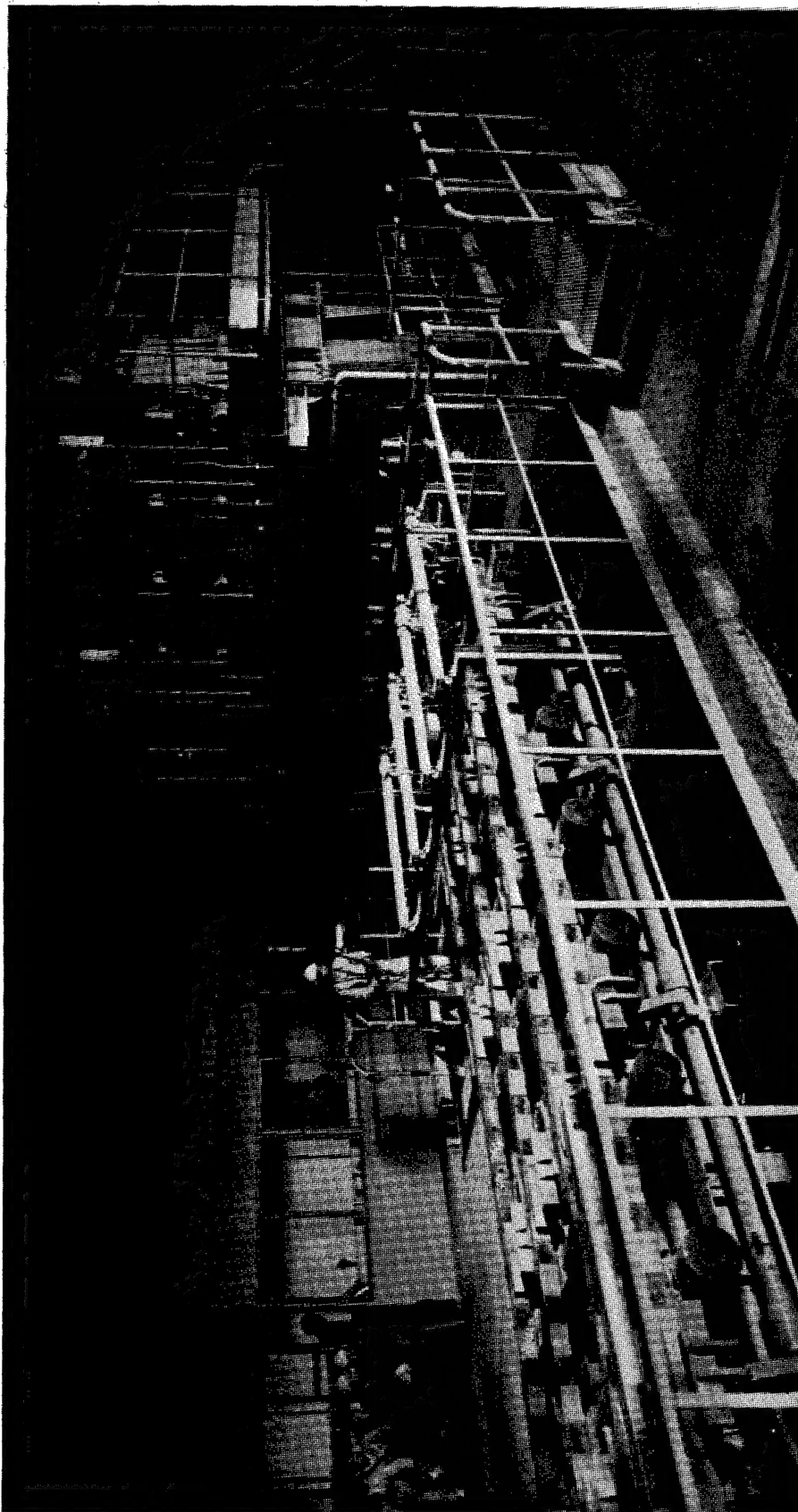


Fig. 28 China's first continuous casting machine has officially been put into operation at the Handan Steel Mill in Hebei. It has an annual output capacity of 175,000 tons of steel blooms.

[Source: Changsha HUNAN HUABAO (HUNAN PICTORIAL) in Chinese No 8, 1982 p 32]

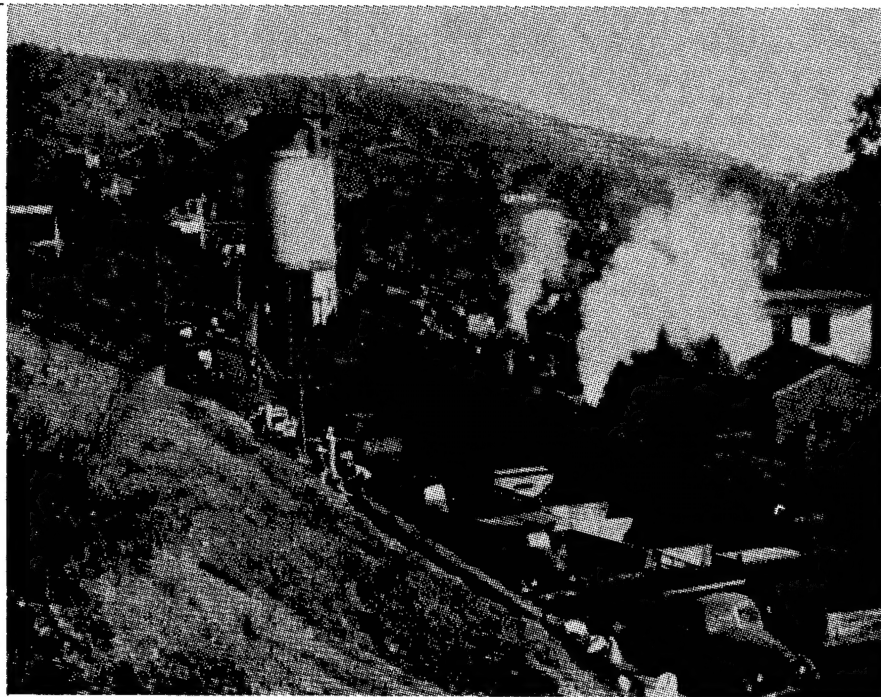


Fig. 29 A busy scene at the Honggong Mine No 1 in Guangdong Province. The Honggong Mining Administration covers an area of 41 square kilometers in Qujiang and Renhua Counties of northeastern Guangdong. Estimates of coal reserves made in the early sixties exceeded 110 million tons. The bureau currently operates eight mines. In addition to a group of drift and locally developed mines, the bureau has built 7 pairs of regular shafts with a design annual output capacity of 1.69 million tons. More than 17,000 staff members and workers are currently employed here.

[Source: Guangzhou GUANGDONG HUABAO (GUANGDONG PICTORIAL) in Chinese No 9, 1983 pp 26-27]



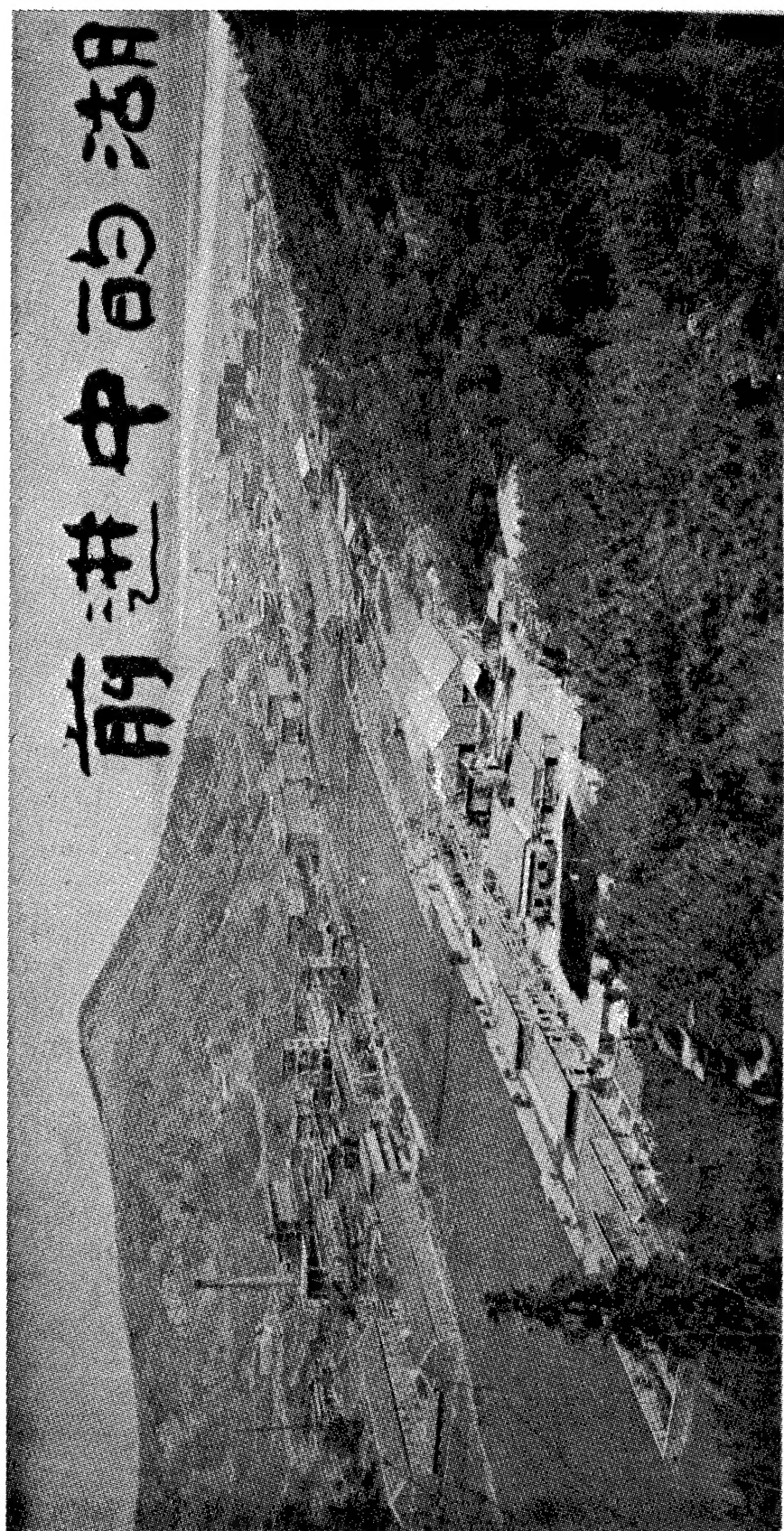


Fig. 30 Photograph of the Hubei Pharmaceuticals Plant located southeast of Gulongzhong in Xiangyang, Hubei. Employing more than 2,200 staff members and workers, this plant is turning out over 20 kinds of pharmaceuticals, including vitamins, antibiotics, tranquilizers, and contraceptives.

[Source: Wuchang HUBEI HUABAO (HUBEI PICTORIAL) in Chinese No 3, 1983 p 16]

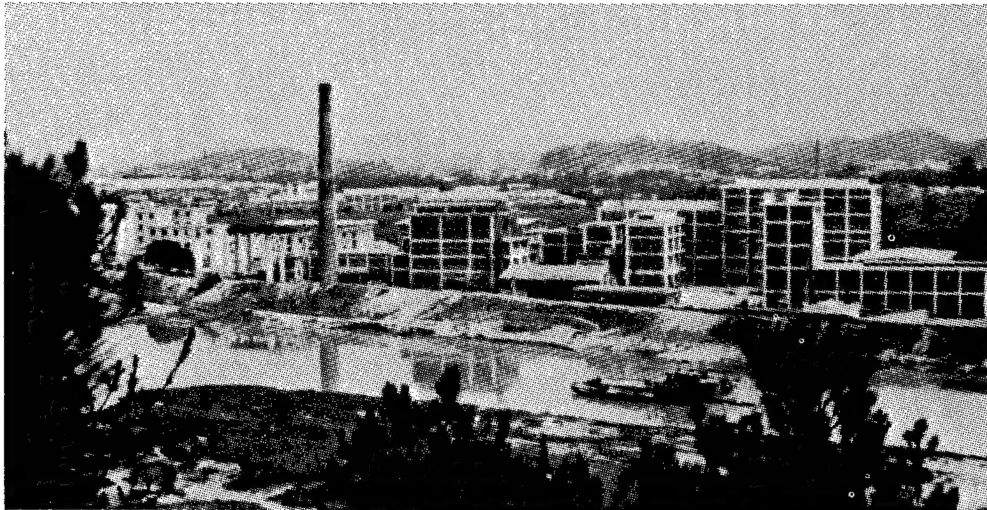


Fig. 31 The Xinning Sugar Mill in Taishan County, Guangdong, which started operation in 1982.

[Source: Guangzhou GUANGDONG HUABAO (GUANGDONG PICTORIAL) in Chinese No 8, 1983 p 2]

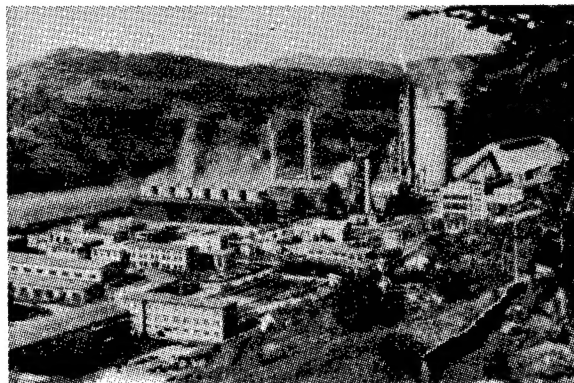


Fig. 32 External view of the Chishui Natural Gas Chemical Fertilizer Plant in Guizhou Province.

[Source: Guiyang GUIZHOU HUABAO (GUIZHOU PICTORIAL) in Chinese No 3, 1983 p 22]